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Carcinoma of the Esophagus

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THE management of malignant disease in man requires a peculiar set of talents. The physician or surgeon who treats such disease must be dedicated to his specialty and endowed with the courage to accept the fact that a high percentage of his patients are going to die of their disease, often in spite of strenuous and skillful efforts on their behalf. The surgeon who treats carcinoma must have a sense of values and a philosophic point of view that will help him accept a high operative mortality rate and a low rate of salvage without becoming discouraged with either his results or his ability.

The treatment of esophageal carcinoma requires the utmost in judgment and technical skill, and today, in the best of circumstances, the survival rate will be low. Without such optimum care, it is obvious that the mortality rate would be 100 per cent, and for this reason alone one should consider a cure of esophageal carcinoma a minor but nevertheless a significant victory, and never stop looking for more effective therapeutic measures or give up in discouragement.

Historical Background.— The study of the esophagus, through the years, has been marked by three major contributions. The first of these was made by Adolph Kussmaul (Fig. 1) in 1868, when he passed the first crude esophagoscope into the gullet of a circus sword swallower in Frieberg, Germany. Then, for the first time in history, the living esophagus could be visualized and its function and diseases studied prior

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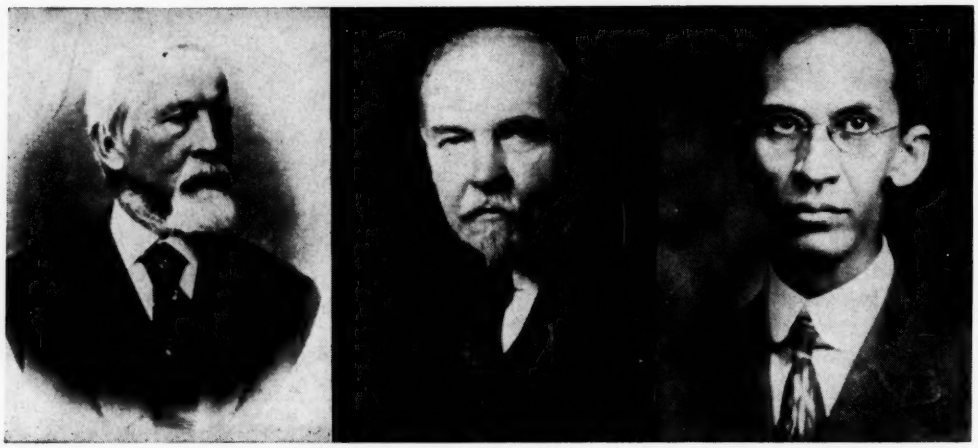

Figs. 1, 2 and 3.—*Fig. 1*, Dr. Adolph Kussmaul (1822-1902), who first passed an esophagoscope into a human gullet in 1868 in Frieberg, Germany. *Center, Fig. 2*, Dr. Franz Torek (1861-1938), who performed the first subtotal esophagectomy for cancer in 1913 at the German Hospital in New York City. *Fig. 3*, Dr. H. H. Janeway (1874-1921), pioneer endoscopist who designed and built esophagoscope in 1918 (a modified version of which is still in use today). He was the first to use radium for esophageal carcinoma, using the esophagoscope to implant radon seeds under direct vision.

to the death of the patient.

For carcinoma of the esophagus, the second milestone was passed in 1913 when Franz Torek (Fig. 2), working in the old German Hospital in New York City, performed the first successful subtotal thoracic esophagectomy for carcinoma. His patient was free of disease for nine years and then died of other causes. This was truly a major surgical feat when one considers the lack of knowledge, in Torek's day, with regard to thoracic physiology, closed anesthesia, blood replacement, electrolyte balance, etc. Without chemotherapy and antibiotics the prevalent 90 per cent mortality rate for Torek's operation can be readily appreciated. Dr. Torek proved that thoracic esophagectomy was feasible and also that esophageal cancer could be cured by a sound surgical procedure.

The third major step in this field was taken when it was learned that roentgen rays and radium could be used with curative effect on malignant esophageal lesions. Credit for much of the early work in this field must be given to Dr. H. H. Janeway (Fig. 3). This physician was a scholar, well versed in research and radiation physics in relation to carcinoma, and, of course, he was a skillful surgeon and a pioneer endoscopist; he designed and built an esophagoscope in 1918, which was used with safety for twenty years. The instruments in use at Memorial Hospital today are slightly modified versions of his original model. Janeway was the first to use interstitial radium in the treatment of esophageal carcinoma; he used the esophagoscope to view the growth and implanted radon seeds accurately under direct vision. His efforts in this field were carefully planned and skillfully carried out, but unfortunately he could not claim any cures.

Diagnosis.—Early diagnosis of esophageal carcinoma is theoretically possible, but of more than 1,300 cases in our series there were only 2 in which the carcinoma was so small as to be undetectable on routine study by barium swallow and esophagram. In each of these two rare cases the disease was correctly diagnosed by esophagoscopic study and biopsy. Both of these early lesions responded very well to surgical management, and they prove beyond the

shadow of a doubt that early esophageal carcinoma can be cured by modern surgical measures.

In searching for possible obscure clues to early diagnosis,[1] I carefully studied in minute detail (as was suggested by the great pathologist and authority on carcinoma, Dr. James Ewing) a consecutive series of 300 patients with carcinoma of the esophagus. It became apparent that prior to the onset of definite symptoms of obstruction more than 10 per cent of the victims had been forewarned of their disease by an unusual sensation of substernal oppression, discomfort and fullness. This symptom was transient and was due to a moderate dilatation of the esophagus, together with increased muscular contractions of the organ. The study was otherwise fruitless, and it was reluctantly concluded that there is no consistent early symptom or sign of this deep-seated, lethal form of carcinoma.

Another disappointment was encountered when we performed routine fluoroscopic and barium swallow studies of several thousand asymptomatic persons over the age of 45 who came for physical examination to our Prevention Clinic. Only 1 case of malignant esophageal disease was discovered by that study. The patient was a woman with a nonulcerated myosarcoma which had been cured by surgical resection more than ten years earlier. Early detection by this screening method is not practical, nor is it economically feasible.

With one notable exception, everyone believes that esophagoscopic study has great value in cases of suspected esophageal cancer. The advantage of this phase of the preoperative work-up are too obvious to need repetition. Occasionally, however, a clear view and a biopsy specimen cannot be obtained endoscopically. This is due to the manner in which the carcinoma extends longitudinally upward in the submucosa. The strong propulsive and peristaltic muscular activity above the tumor tends to cause the proximal mucosa to swell and elongate and so overhang the upper margins of the rigid growth and fill the narrowed lumen, blocking the entrance of the esophagoscope. In such cases a positive microscopic diagnosis can nearly always be obtained by the cytologic study of esophageal washings.

TABLE 1.—*Cytologic Diagnosis (Thoracic Service, Memorial Hospital)*

192 cases "positive" washings	130 cases 67%
"Negative" biopsy	23
Positive cytologic result	18 78%
No biopsy	26
Positive cytologic result	18 69%

TABLE 2.—*Three-Year Survivals (Thoracic Service, Memorial Hospital)*

Total Cases 1926-1954	1,320
3-Year survival	27
3-Year survival rate	2%

Since 1948 we have frequently done esophageal washings in cases of suspected carcinoma when a regular biopsy specimen was difficult to obtain. Of 192 such cases, there have been positive reports in 130 (67 per cent), which has helped immensely in giving us a firm diagnosis upon which to base plans for definitive treatment.

There were 23 cases in which the routine endoscopic biopsy gave negative results and yet washings obtained through the esophagoscope gave positive cytologic results in 18 instances (78 per cent). In another group of 26 cases a biopsy specimen could not be safely obtained, yet the cytologic results were positive in 18 cases (69 per cent). The enormous value of cy-

tologic studies in the diagnosis of esophageal carcinoma is well illustrated by these latter two groups (Table 1).

There have been no "false positive" reports in this series. It is interesting to note the marked similarity between the exfoliated esophageal carcinoma cells and the carcinoma cells of the surgically resected specimens; such studies help the cytologist to perfect his technic and his diagnostic acumen.

Treatment.—From a purely anatomic point of view one should consider the entire esophagus as a unit of the gastrointestinal tract, but from the practical standpoint it is clear that one portion of the esophagus is in the lower part of the neck, another is in the thorax and the third is in the abdomen. The boundaries of three surgical specialties are concerned—head and neck, thoracic and abdominal. It is equally clear that the management of the disease and the choice of treatment is to a large degree determined by the site of the growth. It is also known that the spread of carcinoma beyond the lumen varies greatly at the three different levels.

Carcinoma of the cervical portion of the esophagus spreads by way of the lymphatics to the lower deep cervical lymph nodes bilaterally. The anterior superior mediastinal lymph nodes are often invaded, and malignant cells may be dumped directly into the right or left thoracic duct, thus giving rise to generalized blood-borne metastases.

Carcinoma of the middle third of the esophagus tends to grow slowly, reach a large size and extend directly through the visceral walls into adjacent vital structures of the mediastinum. This often occurs before diagnostic symptoms have appeared. The reason for this may be that the strong pharyngeal propulsion is somewhat lessened at this level, and as the gullet is loosely surrounded by soft tissues, it is easily dilated; dysphagia, therefore, appears late in the course of the disease when a bulky carcinoma causes obstruction to the passage of solid foods. The absence of pain until the disease (at this level) has extended through the entire wall into the mediastinum is another reason for the large size and frequent nonresectability of malignant lesions in this portion of the esophagus. At this level the periesophageal lymph nodes are more frequently involved than are the cervical or perigastric lymphatics.

Carcinoma of the terminal portion of the esophagus presents the most favorable prognosis from the standpoint of ease of management and curability. Such a growth may invade local structures, such as the aorta and the diaphragm, and frequently metastasize to the perigastric lymph nodes and the liver. A fairly high percentage of such lesions give rise to symptoms early enough to permit successful surgical removal.

It would seem reasonable to admit that methods of treatment that could be used for lesions of the lower third of the esophagus might be highly impractical for lesions of the cervical portion. For these obvious reasons, treatment of esophageal cancer should be discussed in relation to the three different levels at which it occurs.

The first report of a successful surgical extirpation of carcinoma of the cervical portion of the esophagus was published by Czerny in 1877.[2] Although his patient died fifteen months later of recurrent carcinoma, his procedure was technically successful, and to him goes the credit for first pointing out the way to surgical management of carcinoma of the first portion of the gullet.

As late as 1908 only 25 surgical esophagectomies had been reported, and the immediate mortality rate was a prohibitive 48 per cent. The first surgical cure was reported by Arthur Evans.[3] His patient had an excision of his cervical cancer

in 1911 and lived 23 years.

In 1942 one of us was able to report 3 cured cases—free of disease more than 10 years; one by surgical extirpation and skin graft and two by irradiation.

Treatment of Cervical Esophageal Carcinoma: Lesions of the cervical portion of the esophagus often cause symptoms relatively early, and, as the anatomic area is surgically accessible, it would seem reasonable to expect a satisfactory surgical survival rate for this area. Early and bilateral metastasis to the lymph nodes is the main reason for failure to cure.

At the time of writing our approach to this disease is surgical if the lesion has not invaded the prevertebral fascia, if it is still movable and if the lymph nodes involved in metastases are limited to one side of the neck. Radical neck dissection, plus hemithyroidectomy and cervical esophagectomy, is carried out in continuity and the larynx, if involved, may be sacrificed. In the present series there are 7 long-term survivors who were treated in this fashion, and in addition there are 2 ten-year cures resulting from intensive external and interstitial irradiation.

Treatment of Carcinoma of the Midthoracic Portion of the Esophagus.— Carcinoma of the middle third of the esophagus is by far the most unsatisfactory of all types to treat. Operation here is difficult, and a satisfactory "cancer" procedure cannot be carried out. Irradiation of any sort has little to offer for this variety of carcinoma. A right thoracoabdominal approach is made and a subtotal esophagectomy, followed by a right colon retrosternal esophagoplasty, is carried out in one stage.

The advantages of the combined right thoracoabdominal approach can be summarized as follows: 1. It permits, in general, a wider and more extensive total esophagectomy and is therefore a better operation for carcinoma. 2. It extends the limits of resectability when the growth is intimately adherent to the bronchus, the arch of the aorta and the lung, because the sharp dissection can be carried out under direct vision. 3. The opposite pleural cavity is less frequently entered than in other procedures. 4. The exposure is excellent and readily permits gastroesophageal anastomosis at the level of the thoracic inlet or even in the neck. 5. If the stomach is employed in the reconstruction, it lies in the mediastinum in a satisfactory anatomic position, without tension, and the blood supply is usually excellent. 6. The operating time may be lessened if two operating teams work simultaneously.[7] There is no need to turn the patient during the operation, and the delay of a two-stage operation for carcinoma is avoided.[6]

In this series, 10 patients have survived more than three years after the operation.

TABLE 3.—*Three-Year Survivals (Thoracic Service, Memorial Hospital): Sex and Age of Patients; Site of Lesion*

Sex	
Female	14
Male	13
Age (mean)	
Female patients	58
Male patients	63
Level of lesion	
Cervical portion of esophagus	9
Middle 1/3	10
Lower 1/3	8

TABLE 4.—*Three-Year Survivals (Thoracic Service, Memorial Hospital): Type of Lesion; Treatment Employed*

Lesion	
Squamous carcinoma	21
Adenocarcinoma	2
Sarcoma	4
Treatment	
Operation	10
Irradiation	9
Both	8

One patient treated by irradiation lived ten years and then died of esophageal carcinoma—either a recurrent or a new lesion or one induced by late effects of roentgen irradiation.

Treatment of Carcinoma of the Distal Portion of the Esophagus.—Carcinoma of the distal third of the esophagus is common, and the prognosis is fairly good in comparison with that of the same disease at the other levels. Carcinoma of the gastric cardia extending to the esophagus should not be included in this category, or the salvage rate will be out of line with the facts. Surgical intervention for malignant disease in this area is carried out through a left thoracoabdominal approach, and wide surgical excision of the tumor is carried out. Continuity of bowel is reestablished by using the stomach. A pyloroplasty is advisable. In 2 of our cases a previous subtotal gastrectomy for ulcer did not preclude the creation of a satisfactory gastroesophageal anastomosis.

SUMMARY

With a large series of esophageal carcinomas available for observation and study, one comes to a real appreciation of the problem involved in the management of this particular disease, but when the salvage rate is as low as that of esophageal carcinoma it is difficult, even with this vast material, to dictate inflexible methods of treatment. The obvious fact is that improved methods and better material are required before there will be an improved salvage rate for this fairly common and very deadly disease.

In a series of 1,320 cases studied by the authors between 1926 and 1954 there were 27 patients who survived for 3 years or more (2 per cent). Twenty-one of these patients had carcinoma of the squamous cell type, and 2 had adenocarcinomas. Four patients with sarcomas of the esophagus lived three or more years (Table 2).

Operation alone (10 cases) and operation plus irradiation (8 cases) accounted for 18 of the long-term survivals. Irradiation alone yielded 9 satisfactory results.

Carcinoma of the esophagus is predominantly a disease of the male (4 male to 1 female patient) but in the group of three-year survivals there were 14 female and 13 male patients, which suggests that women, for some reason or other, seek professional attention at an earlier stage of the disease; or perhaps they have it in a less malignant form. In women this disease develops at the age of 58, whereas the men are usually five years older — 63 (Table 3).

The surgical management of esophageal carcinoma requires a different approach for each of the three major levels at which the disease occurs. In the cervical region, extirpation of the cancer should be combined with radical neck dissection. For lesions of the middle third, a right thoracoabdominal Torek type of esophagectomy and esophagoplasty, with use of a retrosternal right colon transplant, is the authors' choice. Carcinomas of the lower portion of the esophagus are well managed by a left thoracoabdominal approach, segmental resection of the growth and gastroesophageal anastomosis (Table 4).

The cures are few, but when immediate reconstruction is possible one may accept a reasonable period of good palliation even in cases in which the disease is obviously advanced.

RÉSUMÉ

L'observation et l'étude d'une importante série de carcinomes de l'oesophage permet une appréciation réelle du problème du traitement de cette affection. Le pourcentage de bons résultats est cependant si faible que même avec un matériel aussi vaste il est difficile d'établir des méthodes

de traitement rigides. Il est évident qu'il faudra encore beaucoup améliorer les techniques et l'instrumentation avant de pouvoir compter sauver un plus grand nombre de malades.

Dans une série de 1.320 cas étudiés par les auteurs de 1926 à 1954, 27 malades, soit 2%, ont eu une survie de 3 ans ou plus. Vingt-et-un cas étaient des carcinomes du type squameux, 2 étaient des adénocarcinomes, et 4—qui ont survécu 3 ans ou plus—des sarcomes de l'oesophage.

L'opération seule (10 cas) et l'opération suivie d'irradiations (8 cas) explique les 18 longues survies. L'irradiation seule a donné 9 résultats satisfaisants.

Le carcinome de l'oesophage est nettement plus fréquent chez l'homme (4 hommes pour une femme), mais dans le groupe de survies de 3 ans on a compté 14 femmes et 13 hommes, ce qui donne à penser que les femmes, pour une raison ou une autre, consultent le praticien à un stade précoce de l'affection; peut-être aussi sont-elles atteintes d'une façon moins maligne. La maladie se développe à l'âge moyen de 58 ans chez les femmes, de 63 ans chez les hommes (fig. 3).

Le traitement chirurgical comporte une voie d'approche spéciale pour chacun des trois principaux niveaux de localisation. Dans la région cervicale l'extirpation de la tumeur devrait être combinée avec une dissection complète du cou. Pour les lésions du tiers médian, l'auteur donne la préférence à l'oesophagectomie avec oesophagoplastie thoraco-abdominales droites, selon Thorek, avec utilisation d'un greffon rétrosternal droit du colon. Lors de carcinome du tiers inférieur, il est indiqué d'intervenir par voie thoraco-abdominale gauche, et de pratiquer une résection partielle de la tumeur avec anastomose gastro-oesophagienne (fig. 4).

Les guérisons sont rares, mais lorsqu'une reconstruction immédiate est possible l'on peut s'attendre à une rémission d'un certain laps de temps, même lorsque la lésion est à un stade avancé.

RIASSUNTO

Quando si abbia a disposizione una grande quantità di casi di carcinomi dell'esofago si riesce ad apprezzare realmente l'importanza della terapia di questo male, ma quando le media di sopravvivenza sono così basse come quelle che si ottengono nella cura del cancro esofageo è assai difficile, anche disponendo di abbondante materiale, fornire adatti metodi di cura. E' ovvio che è necessario migliorare i metodi e i materiali se si vuole ottenere una maggior quota di guarigioni.

In una serie di 1320 casi studiati dall'autore fra il 1926 e il 1954 ve ne furono 27 che sopravvissero per tre anni o più (2%). Di questi malati, 21 avevano carcinomi pavimentosi e 2 adenocarcinomi; gli altri 4 avevano sarcomi e vissero più di 3 anni. Diciotto di questi risultati favorevoli furono ottenuti con l'intervento seguito dalla irradiazione, 10 col solo intervento, e 9 colla sola irradiazione.

Il carcinoma dell'esofago è soprattutto una molattia del maschio (4/1), ma fra i malati che sopravvissero oltre i tre anni vi era no 14 femmine e 13 maschi — il che fà pensare che le donne, per una ragione o per l'altra, richiamino l'attenzione sui propri disturbi a uno stadio più precoce o addirittura abbiano forme meno maligne. In esse la malattia compare all'età di 58 anni mentre negli uomini compare 5 anni dopo.

La cura chirurgica richiede tre vie di accesso differenti a seconda della sede: nella regione cervicale, l'asportazione del cancro deve essere associata ad uno svuotamento radicale del collo; per le lesioni del terzo medio viene consigliata la via toraco-addominale destra di Torek con esofagectomia ed esofagoplastica mediante tra-

pianto retrosternale del colon; i carcinomi del tratto inferiore sono ben dominati attraverso la via toraco-addominale sinistra: si esegue la resezione segmentaria e l'anastomosi gastro-esofagea.

Le guarigioni sono scarse ma si può contare su un certo periodo di buona salute anche nei casi piuttosto avanzati.

ZUSAMMENFASSUNG

Ein umfangreiches Krankenmaterial mit Speiseröhrenkrebs, das zu Beobachtungen und Untersuchungen zur Verfügung steht, ermöglicht eine echte Würdigung des Problems, das die Behandlung dieser besonderen Erkrankung in sich trägt. Wenn man jedoch einem so niedrigen Prozentsatz von Heilungen gegenüber steht, wie es beim Speiseröhrenkrebs der Fall ist, ist es selbst beim Vorliegen eines grossen Krankenmaterials schwierig, starre Methoden der Behandlung zu diktieren. Es ist eine offensichtliche Tatsache, dass eine Vervollkommnung der Behandlungsverfahren und ein besseres Krankenmaterial erforderlich sind, bevor höhere Prozentsätze der Heilung dieser ziemlich hüufigen und sehr tödlichen Erkrankung erwartet werden können.

Von 1320 Kranken, die von den Verfassern in den Jahren 1926 bis 1954 untersucht wurden, lebten nur 27 nach drei oder mehr Jahren (2 Prozent). Von diesen hatten 21 einen Schuppenzellkrebs und 2 ein Adenokarzinom. Vier Kranke mit Speiseröhrensarkom überlebten drei oder mehr Jahre.

Rein chirurgische Behandlung (10 Fälle) und Operation mit Bestrahlung (8 Fälle) waren für 18 Erfolge mehrjährigen Überlebens verantwortlich. Bestrahlung allein führte in 9 Fällen zu befriedigenden Ergebnissen.

Der Speiseröhrenkrebs tritt vorwiegend beim Manne auf (4 Männer im Verhältnis zu einer Frau); unter den 27 Kranken jedoch, die drei Jahre überlebten, befanden sich 14 Frauen und 13 Männer. Das lässt darauf schliessen, dass vielleicht Frauen aus irgendwelchen Gründen ärztliche Hilfe in einem früheren Stadium der Erkrankung in Anspruch nehmen, oder vielleicht dass die Krankheit bei ihnen in einer weniger bösartigen Form auftritt. Bei Frauen entsteht die Krankheit im durchschnittlichen Alter von 58 Jahren, während die Männer gewöhnlich 5 Jahre älter (63) sind (Tabelle 3).

Die chirurgische Behandlung des Speiseröhrenkrebses erfordert verschiedene Zugangswege für die drei verschiedenen Sitze, an denen die Erkrankung meistens auftritt. Beim Krebs des Halsabschnittes muss die Resektion der Geschwulst mit einer radikalen Ausräumung der Halsweichteile verbunden werden. Beim Sitz der Erkrankung im mittleren Speiseröhrenabschnitt bevorzugen die Verfasser eine rechtsseitige thorakoabdominale Resektion der Speiseröhre nach Torek und eine Ösophagoplastik unter Benutzung eines retrosternalen Transplantats vom rechten Kolon. Der Krebs des unteren Speiseröhrenabschnittes lässt sich gut durch einen linksseitigen thorakoabdominalen Zugang mit Resektion des erkrankten Abschnittes und Anastomosierung der Speiseröhre mit dem Magen behandeln (Tabelle 4).

Zu Heilungen kommt es selten. Wenn jedoch eine sofortige Wiederherstellung der Speiseröhre möglich ist, kann man sogar in offensichtlich vorgeschrittenen Stadien der Erkrankung eine einigermassen annehmbare Dauer von Symptomfreiheit erwarten.

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Action may not always bring happiness; but there is no happiness without action.
—*Disraeli*

Leisure is a beautiful garment, but it will not do for constant wear.
—*Anon.*

Simplicity, of all things, is the hardest to be copied.
—*Steele*

Advice is like snow; the softer it falls the longer it dwells upon, and the deeper it sinks into the mind.
—*Coleridge*

Men give nothing away so liberally as their advice.
—*La Rochefoucauld*

Advice is seldom welcome. Those who need it most, like it least.
—*Johnson*

Trauma Resulting from Electricity

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ELECTRICITY is one of the basic quantities in nature; a form of energy generated spontaneously as lightning, or artificially produced in the form of electric current. It is considered by many investigators that the effects resulting from the two forms are the same. The primary principle of electric action is that the charge (the fundamental concept of electricity), whether lightning or an artificially produced electric current, seeks to ground or discharge itself into the earth. When the human body is so placed as to become a part of the path of electricity between two poles of different potential, injury, shock, and/or death may ensue.

The purpose here of this article is to attempt an explanation of the histopathologic, physical and chemical changes brought about by electrical phenomena. The sources of the answers to this complex subject have been the reports of intensive investigations and experimentation by many scientific workers in the fields of electrophysics, electrochemistry and electrodynamics. Other valuable data have been obtained from the studies and reports of many physicians and surgeons.

About three-fourths of the horsepower used in United States factories today is electric. Rapid electrification during the last few decades has caused a new industrial revolution. Automatic machinery, for example, the chief factor in standardized mass production, would hardly be possible without the smooth, steady, easily controlled action of electric motors. Likewise, much modern transportation equipment and many home and office appliances are now electrified.

Safeguards are constantly being developed to prevent or minimize the hazards of accidental contact with electricity. Nevertheless, the ever broadening use of electric current for home and industrial lighting and power and the unpredictable and uncontrollable atmospheric phenomenon, lightning, account for the frequency of injuries and fatalities from these sources in accident and casualty statistics.

When electrical injury or shock has occurred, it follows that some portion of the body has been interposed between two electrodes in such a manner as to complete an electric circuit. When direct or indirect contact with electric force results in a flow of electricity through the tissues, from one electrode to another, or to the earth, symptoms may be immediate, secondary or delayed. This depends upon several factors: (1) the type and amount of current, (2) resistance, (3) the path of the current, (4) the duration of contact, (5) the conditions surrounding the accident and (6) the question of individual susceptibility.

Shock and immediate electrocution are the two most serious results of electrical accidents. Other serious consequences include various damaging effects upon the heart and nervous system; stimulation of strong muscle contracture; inhibition of function of vital organs in the path of the current; thermal injuries, with destruction

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of the cells and vital tissues, such as bone, by generation of heat, and extensive, latent necrosis of burned tissues. This necrotizing of burns from electricity is the insidious characteristic that makes diagnosis and treatment of such lesions different from that of thermal burns.

Deaths caused by electricity are attributable to several causes. One may be the lack of, or delay in immediate application of, modern principles of resuscitation in cases of electric shock. A second, and more obvious cause, as a result of which death occurs in spite of prompt treatment, is irreversible ventricular fibrillation of the heart caused by electricity. A third is instantaneous electrocution or shock sufficient to cause death. In still another case the victim may outlive the immediate accident only to succumb later of complications, such as destructive processes and effects upon the heart and nervous system, prolonged muscular tetany due to asphyxia, and/or the fatal progression of electrical burns.

For the medical profession to understand what occurs when electricity accidentally comes into contact with the body or traverses it, some knowledge of fundamental electrophysics is required. As a matter of fact, it seems pertinent to note in passing that the physics of electricity and the various electromedical currents are so incorporated in medicine that every physician and surgeon should not only know the construction and control of every piece of apparatus he employs, but the basic rudiments of electricity and its everyday use.

Electrophysiology.—Any form of electricity, when applied to the tissues of the human body, will exert a primary physical effect, which in turn affects cellular activity and produces a secondary physiologic effect. This hitherto unexplored field has received careful study during recent years. As a result, knowledge has been gained of the electrical phenomenon as it pertains to membrane permeability and action currents, and allows some interpretation of the possible effects of certain electric currents introduced from the outside. Burr and Lane[1] pointed out that electrical differences are constant, but vary from movement to movement, and that, therefore, they must presumably be intimately related to such things as cell division and metabolic rates, the internal economy of each cell, and other factors.

Several theories concerning differences of potential are clues to movements of ions across polarized membranes, or to the fact that a fall of potential is created across the membranes. An ion has beeen described by Best and Taylor[2] as an "electrically charged atom or group of atoms, referred to as a cation or an anion respectively, according to the nature of the charge—positive or negative—which it holds." Local reaction to a stimulus, according to Wiggers,[3] causes a migration of negatively charged ions—aligned at rest on the interior of the membranes—to the exterior. In other words, the membranes become depolarized. The external surface becomes negative with respect to adjacent regions, and this generates the local biochemical current. According to Winton and Bayliss,[4] an injury ruptures a structure in the tissues, presumably a membrane of varying permeability, which ordinarily prevents passage of a polarization current. As a result, ions normally kept apart are allowed to pass in and out through the membrane. The direction of flow of the current shows negative ions passing out and positive ions passing in.

Electric current may be carried by electrons, such as conducting solids, or by charged molecules or atoms, as in the case of certain liquids and gasses. Evidence of the existence of an electric current is dem-

onstrated by development of heat in all parts of an electric circuit, deflection of a magnetic needle and/or chemical action under certain conditions.

The human body consists of a composite mass of tissues with varying electrical conductivity and constants, like any other material substance. All cells are bathed in lymph or cellular fluids, and an electric current, in order to reach the cells, has to pass through this fluid. The tissue fluid consists of water, albumin, fibrin and salts. This complex solution acts as a conductor for electrolytic solutions containing dissociated atoms of the component particles of acid bases or salts.

Principles of Ionization.—With regard to the physicochemical principles — the electrolytic dissociation theory—the following observations may help to clarify the mechanism that regulates the physiologic reactions of the cellular fluids to electricity. It may also help to show the strong role of ionization in the production of electric shock.

According to Hemingway and Stenstrom,[5] electrical conduction in the tissues is a problem of conduction in an electrolytic solution. A tissue may be regarded as a nonhomogeneous solution, and, if an electric current is applied to the body, conduction and subsequent effects will depend upon the form, strength and duration of the current. In this regard Faraday formulated two laws: 1. The amount of any one substance liberated is proportional to the quantity of electricity that has traversed the solution. 2. Chemically equivalent quantities of ions are liberated by the passage of equal quantities of electricity. The effects are redistribution of ions and formation of new chemical bodies at the electrodes.

When such chemical substances as acid bases or salts are dissolved in water, some of their molecules undergo dissociation into their constituent ions. In other words, some molecules of the substance break into two parts, one of which is charged negatively and the other positively. The metals and hydrogen always carry the positive charge, and the remaining part of the molecule the negative. This process is known as dissociation or ionization. The ions move through the tissue fluids, some recombining, while others are produced by the dissociation of other molecules. Substances whose molecules are thus dissociated are known as electrolytes.

If an electric current is passed through the tissue fluids, each ion carries a charge of electricity to an electrode. The negative ions are carried to the positive electrode and the positive ions to the negative; therefore, conduction of electric current through the fluid is influenced by the concentration of the ions present, or by the degree of dissociation of the electrolytes. Arriving at the electrode, the ion gives up its charge, escaping into the air if gaseous, settling on the electrode if metallic, or entering into chemical combination. Thus, death from electric shock may be partially explained by ionization and changes in cellular composition.

Thermal Effects of Electricity.—Heat is one of the universal forms of energy into which all forms are converted. All electric currents cause a rise of temperature in a conductor, owing to the conversion of electricity into heat, and thermal effects result from the heat thus developed. The alternating current of high voltage and amperage used in electrocutions produces enough heat to coagulate the tissues and raise the temperature of the body appreciably. It is a fact well known in chemistry that the melting point of calcium is 700 to 900 C., and thus the heat generated in electrical accidents is often sufficient to volatize, necrotize and sometimes actually eliminate bone. Baldridge[6] has pointed out that, particularly in arc burns due to

electrical accidents, the tissues are heated by a current of 2,500 to 3,000 C.

In 1877, Joule, an English physicist, formulated certain laws concerning the heating effects of electric current:

1. The heat produced is directly proportional to the square of the current strength.

2. The heat produced in different conductors is directly proportional to the resistance of each conductor.

3. The resulting quantity of heat is in direct proportion to the duration of the passage of current.

Heat is produced in solid conductors by both direct and alternating current.

Resistance of the Body to the Passage of Electric Current.—The tissues of the body possess varying resistance to heat and current force. Those of higher resistance, when traversed by electricity, heat to a higher degree. Electric current will not pass along a path of high resistance, however, when there is a parallel path of lower resistance.

The total body resistance will vary according to the distance between the electrodes and the perfection with which they are applied. In legal executions, for example, with perfectly applied electrodes, the resistance has been placed by Kennelly[7] at 218 ohms. With hand-to-hand contact, Jelliffe[8] observed that resistance varied from 550 to 1,970 ohms.

Resistance of Skin: Skin has greater resistance than have other tissues of the human body, the horny layer being most resistant. The porosity of the skin, as well as the sweat glands, influences cutaneous resistance, and heat decreases it, owing to the increased activity of the sweat glands. This accounts for the better conductivity of the palms of the hands and the extreme resistance of the feet, with their thick, horny layer of tissue and absence of sweat glands.

Dry skin offers resistance of 900 to 1,000 ohms; wet skin, no more than 200 to 300 ohms. An ohm is the unit of resistance to the constant flow of electric current. The formula for measurement of the ohm is Ohm's Law, and reads as follows:

$$\text{Volts} = \text{ohms} \times \text{amperes}$$

$$\text{Ohm} = \frac{\text{volts}}{\text{amperes}}$$

$$\text{Amperes} = \frac{\text{volts}}{\text{ohms}}$$

It can be noted from the foregoing statements that the current, voltage and resistance in one circuit are interrelated. Chapuis[9] stated that skin resistance is about 40,000 ohms per square centimeter. Critchley[10] pointed out that perspiration lowers skin resistance 12 times, and that in water the resistance drops 25 times.

When the skin is burned by electricity its resistance is greatly increased, and because of this the current may be broken. If carbonization takes place, skin resistance is reduced. Several other factors influence skin resistance, such as cleanliness; vascularity; the size, shape, and nature of the electrodes; the size, firmness, and duration of contact, and the path taken through the body by the current.

Resistance of Tissues Other than Skin: Electrical conductivity of all tissues of the body shows variations, and resistance depends largely upon water content and density (muscle, 1,500 ohms; brain, 2,000 ohms; liver, 900 ohms, and bone, 900,000 ohms, approximately). In general, the tissues that contain the most water are richest in ions and are the best conductors. Blood is considered the best conductor, and for this reason most of the electric current passes along the blood vessels.

Bone is one of the poorest conductors; nevertheless bone lesions are frequent in electrical accidents, especially when the current enters the body through the skull. Resistance of a large surface, such as the

skull, with its diploe and blood vessels, is less than that of the layer of soft tissue which covers it; therefore, the current will pass through the bone. In 1887, Erb, a German neurologist, demonstrated that an electric current can pass through the skull. He placed an isolated frog muscle in the brain of a corpse. When a galvanic current was passed from the sides of the skull, muscular contractions were noted.

Comparative Dangers According to Type, Amount, Duration, and Path of the Current.—It has been demonstrated that accidental contact with anything above 110 to 115 volts of electricity is dangerous if the victim is wet and well grounded. In fact, brief contact with a 1,000 volt high tension current when the body is dry may be less dangerous than contact with 110 volts when the body is wet and well grounded. These facts have been attested by many authors. For example, Williams[11] observed that 110 volts or thereabouts is usually fatal; Jellinek[12] that currents as low as 25 volts can be dangerous if the skin is moist and a large contact is made. This is, of course, contingent also upon the amount of amperage.

Electric currents of 1,000 volts or less are considered low tension; above, high tension. Electricity used for lighting and power requires conduits of large voltage and amperage. This leads to a point of emphasis: that, in addition to the voltage, there are other important features of current strength that must be considered in assaying the elements of danger from accidental contact with electric current. These are amperage, cycles or frequency, and direction of the current. First, it is considered that a very low voltage may be dangerous if the amperage is high. Local injuries are usually caused by current of small voltage and amperage. General or lethal effects in electrical accidents, however, are the result of large voltage combined with excessive amperage, sufficient to overcome the resistance of tissues. Lightning has been described by Simpson[13] as operating at a potential of some thousands of millions of volts, with an amperage of 20,000 to 100,000 amperes generated.

The amount of amperage cannot be accurately estimated after an accident. Its potency as regards danger from accidental contact with electricity, however, is being constantly emphasized as equal to that of the voltage, or even greater. This point is stressed today by researchers and manufacturers engaged in the production of electric equipment and appliances.

Second, alternating current is considerably more dangerous than direct current of like voltage and amperage. Alternating current (AC) changes its direction many times in a second; direct current (DC) flows continuously in one direction. Lightning, as described by Simpson[13] is alternating current with a large number of reversals each second. According to McConnell,[14] fatal shock resulting from contact with direct current of less than 300 volts is rare. As the voltage of direct current increases, however, so does the danger.

In the third place, the number of cycles or changes in direction of the current occurring in a second, the so-called frequency, is also important. The ordinary current alternates at a rate of 60 cycles per second. Low frequency is any current below 10,000 cycles; high frequency 100,000 or more cycles per second. As the number of cycles increases, the danger diminishes. For example, alternating current of low frequency, 15 to 60 cycles per second, may cause death in well-grounded subjects even when the voltage is as low as 110 to 115 volts. Conversely, alternating currents of high frequency may be handled with relative safety, even when the voltage is high. This may be explained by the fact that muscles and nerves are insensitive to extremely high frequencies.

Path of the Current.—Having overcome the resistance of the skin and entered the body, an electric current usually does not flow in a direct line from one electrode to another, because of the varying resistance of the structures in its path. The current diffuses itself more or less throughout the body, and generally only those tissues show response which lie in its direct path. As the current loops out into several paths, the depth of the tissue will have much to do with the actual amount of the total current it receives; the deeper a tissue is situated, the smaller will be the amount.

Voltage has some influence on the path of the current. Currents of low voltage flow along the path of least resistance; currents of high tension have a tendency to flow along the shortest path. An important factor in the action of current upon a given area is its density. That is, the same amount of current passing through a large area may have no appreciable effect, whereas when concentrated on a small electrode the effect may be tissue destruction.

Injuries produced by electrical accidents are more dependent upon the path of the current than upon its intensity. For example, current passing through the left side of a victim's chest or brain can be more dangerous than that traversing the right side, because of its damaging effect upon the heart. On the other hand, current passing in through one extremity and out through another is rarely fatal. Nevertheless, although it is important whether vital organs are traversed by the current, the amount of electricity must still be a serious consideration.

Duration of Contact.— In addition to, and frequently in spite of, the type and amount of electricity and the path it pursues through the body, the danger increases in direct proportion to the duration of contact. A victim may be fixed to a conductor for a long period, until he is disengaged from the current or the current is broken. This may occur either by a rescuer turning off the power or short circuiting, or by the victim's being flung from the contact by strong muscle contractions, thus breaking the current. These strong tetanic contractions of the musculature are typical as electricity traverses a body, often resulting in torn muscles, luxation of joints, fractured bones and extreme opisthotonos. Frequently death occurs as a result of spastic contraction of the skeletal muscles, leading to fatal asphyxia.

The duration of a lightning flash has been estimated at only about one-thousandth of a second.

Clinical Changes in Severe or Fatal Electrical Accidents.—Shock: Electric shock denotes the sudden harmful influence of an electric current on the body. Currents of low voltage arrest the heart without affecting the respiration, and low frequency currents passing through the cardiac area may cause death by fibrillation of the ventricles. Likewise, there may be tonic and clonic spasms, rigidity of the muscles, including the respiratory muscles, and paralysis or entire stoppage of cardiac action. Shock may be accompanied by severe burns, or there may be no burns at all if the contact is good and the resistance offered by the body is slight.

Nevertheless, although some difference of opinion exists as to whether death from electric shock is caused by cardiac damage or by respiratory paralysis due to action on the medulla, the consensus is that ventricular fibrillation is a primary cause of death or other severe consequences in electrical accidents and electrocutions. This and other important factors have been demonstrated by the human and animal experiments reported by Lewis,[15] Hooker,[16] Hooker and his associates,[17] Koeppen,[18] Urquhart,[19] and many others.

For example, in a series of intensive

animal experiments, Urquhart observed that the initial effect of alternating current passing through the brain is intense stimulation of all the centers in its path. He noted a generalized muscular contraction which, together with pronounced vasoconstriction, results in a great accumulation of blood in the venous side of the circulation. He stated that this stimulation of the vagus centers causes inhibition of the heart, which to a great extent can be obviated by section of both vagi. In Urquhart's opinion, the fact that there is not total absence of inhibition of the heart with this procedure is evidence of the presence of extravagal inhibitory fibers. Furthermore, he noted that when these are controlled with atropine, there is no inhibition of the heart on the passage of electric current. He stated, "When the current is broken, this period of stimulation is followed by a period of profound inhibition, or paralysis of all these centers. The animal becomes limp and unconscious; respiratory movements are absent; the eye reflex cannot be elicited; the blood pressure rises to almost twice the normal and then falls with the dilatation of the blood vessels even though the heart beats at an increased rate; there is no reflex response to sensory stimulation (stimulation of the central end of the cut sciatic nerve); and severe stimulation of the central end of the cut vagus has no reflex effect on the heart."

According to Urquhart, artificial respiration brought about recovery in all cases in which gross damage to the brain or spinal cord was due to the heat generated at the point of application of the electrodes, demonstrating that the paralysis was possibly temporary. For this reason he thought it safe to conclude that the nerve centers themselves are paralyzed by the passage of electric current, so that impulses reaching them are blocked completely, and that normal rhythmic discharge of the respiratory center ceases.

In Urquhart's opinion the foregoing observations explain the failure of counterstimulation as a help in resuscitation, as well as inability to obtain reflex vagal inhibition of the heart in a shocked animal. He noted a highly important factor: that only after artificial respiration with efficient aeration could the inhibition be observed to pass off.

Ventricular Fibrillation: It is common knowledge that ventricular fibrillation is a frequent cause of death in man and lower animals in the presence of heart disease. Interest here, however, is confined to the harmful effects of electricity as a cause of ventricular fibrillation, with its implication of death or near death in electrical accidents. In 1850 Ludwig showed that, in animals, ventricular fibrillation could be initiated by direct electrical stimulation of the ventricular muscle. This has been responsible, in great part, for a keener insight into the disorder in man.

In the normal mammalian heart the atrioventricular or His-Tawara node, so named for His, a German physiologist, and Tawara, a Japanese pathologist, is a small bundle of interwoven fibers in the conduction system of the central fibrous portion of the heart. These are known as Purkinje fibers, also named as a result of studies, this time by Purkinje, a Bohemian physiologist.

The atrioventricular node is the pacemaker and initiates each impulse. From this node the impulse spreads over both atria, then passes from the atria to the ventricles via the auriculoventricular node and the bundle of His. Within the ventricles it travels along the right and left bundle branches and the network of Purkinje fibers. Because of this anatomic disposition, the various myocardial fibers contract in a fixed and efficiently prearranged manner. The atria contract before the ventricles do[5] and within the atria as well as the ventricles there exists a fixed pat-

tern of impulse spread. In the ventricles all myocardial fibers are excited and start contracting within a few hundredths of a second. This mechanism of excitation and contraction results in a synergetic and efficient contraction of all ventricular fibers. Thus a forceful ventricular systole is produced, sufficient to overcome pressure in the ventricle and the pulmonary artery and to expel adequate blood into these vessels.

The even spread of the wave of contraction over the heart depends upon the uniform excitability of the muscle fibers. When the stimulus to contract arrives, if certain of the muscle fibers or bundles of fibers have a greater or lesser excitability than the others, it will not produce a uniform contraction of neighboring bundles, and with coordinated action of the cardiac musculature there is a confused movement in which each part of the heart is contracting independently of the rest.

When the myocardial fibers of the atria, instead of contracting synergetically, enter into contraction haphazardly, atrial and auricular fibrillation result; when the same condition exists in the ventricles, ventricular fibrillation results. With ventricular fibrillation, no blood is expelled from the ventricles and the arterial blood pressure abruptly drops to zero. This fibrillation, or so-called delirium cordis, can be produced by a large variety of experimental methods, for example, by stimulating the ventricles with induced electric shock, by ligation of a large branch of the coronary artery or by stimulation of the heart in the region of the auriculoventricular bundle.

In the higher animals, ventricular fibrillation is rarely reversible. It is interesting, however, that the ease with which it is set up by the application of an electrical stimulus varies to a marked degree in lower animals. In those animal hearts in which fibrillation can be elicited only with difficulty, recovery can usually be effected either by stopping the heart by means of cold and then allowing it to beat again, or by the administration of epinephrine.

Auricular fibrillation is the most common of the cardiac disturbances. It should be pointed out, however, that auricular fibrillation rarely occurs in the absence of myocardial disease and therefore is not relevant in a discussion of the effect of electric current upon the heart.

The final and most extreme disturbance of the ventricles is ventricular fibrillation, and, as has already been stated, in the human subject it is a frequent consequence of accidental contact with electricity. Impulses traverse the ventricles so rapidly that coordinated contractions do not occur and are replaced by rapid, irregular twitchings of the ventricular muscle. In the dynamics of circulation, the heart suddenly stops. The electrocardiograms that represent this state show very bizarre, rapid and irregular ventricular complexes. The initial phase of the ventricular waves (Q-R-S) is broadened and the T waves fuse with them, so that they become indistinguishable. They vary in height from oscillations of large amplitude to coarse, low movements of the base line.

Although brief paroxysms of ventricular fibrillation are sometimes not fatal, ventricular fibrillation *per se* is difficult to study and investigate, because, although recovery does occasionally take place, the condition is, in most instances, incompatible with human life. Although the duration of current is important in electrical accidents, because the more lasting the stimulus the smaller the amount of current required to produce fibrillation, death resulting from ventricular fibrillation does not require prolonged exposure to current; it may occur after brief exposure.

It was concluded by Ferris and his associates[20] that the effect of electric shock is

related to the magnitude of the current rather than the voltage. They noted in experimental animals that the magnitude of the current necessary to initiate ventricular fibrillation when the stimulus is applied on the body surface increases roughly with both body and heart weight.

According to Moe and his associates,[21] though repetitive discharges from center or centers are not required to sustain fibrillation, they are essential to initiation, at least when fibrillation is induced by a strong electrical stimulus.

Effects of Electricity on the Nervous System.—Neural changes in electrical accidents are usually in the foreground, whether or not the brain is in the direct path of the current. The most common symptom is unconsciousness, which is usually immediate but may occur after several minutes. It may last for a considerable time, even hours, and is accompanied by symptoms of circulatory failure and respiratory arrest.

Neurologic symptoms, such as opisthotonos, convulsions, myoclonic movements and twitching, may occur, in addition to possible loss of pupillary and pathologic reflexes, such as Babinsky reflexes. The immediate epileptic type of generalized seizure at the moment of severe accidental electric shock is rare. This may be explained by the fact that the current rarely passes directly through the brain in its full intensity. Not all states of unconsciousness associated with electrical accidents are the direct result of the current; sometimes they are due to associated trauma.

The pathologic effects are divided between those patients in whom the brain is in direct path of the current and those in whom involvement of the brain is secondary to respiratory and cardiac failure. Critchley[22], in discussing the morbid changes encountered in electric shock, included the following conditions: severe cerebral edema with high intracranial tension; petechial hemorrhages throughout the central nervous system; chromatolysis of the neurons in the central nervous system and peripheral nerves; fragmentation and twisting of axons, and endothelial infiltration of the epineurium.

The concept of local injury to the nervous system reported by Alexander[23] is that sufficient intensity and duration of the passage of current through the brain may cause prolonged local basal constriction, followed by vasoparalysis and leading to the formation of thrombi and necrosis of the vessel walls, with subsequent necrosis of the brain tissue itself. This explains unconsciousness when current passes through the brain; when it does not, the unconsciousness is caused by electrogenic, cardiovascular and respiratory failure. Patients who recover from unconsciousness in electrical accidents often have retrograde amnesia. Others may remember identical painful sensations, and permanent damage to the cranial nerves may occur as a sequela.

The greatest density of electric current is to be found at the sites of entrance and exit. While current passing in one extremity and out through another is seldom fatal, however, MacFarlan[24] observed that it often produces lesions in the lower and middle cervical segments of the spinal cord. Panse[25] has suggested that a foot-to-foot or leg-to-leg circuit results in degeneration in the lumbar and sacral segments, with consequent atrophy, parasthesia and anesthesia. In accidents due to lightning, parasthesia and temporary loss of power in the limbs is often encountered, caused by the passage of current along the peripheral nerves.

In his studies of experimental animals affected by electricity, Langworthy[26] observed hemorrhages mainly in the brain stem and cord, with all voltages and

amperages, although some hemorrhages also appeared in other organs. Nerve cell disintegration was observed only when the voltage was high (500 to 1,000 volts), and in this regard direct current seemed to produce more severe changes than did alternating current.

In examining the brains of legally executed criminals, Hassin[27] noted that when the current enters the cranial cavity and traverses the entire central nervous system, with voltages up to 2,300 volts applied for more than fifty seconds, death, as a rule, occurs quickly. He observed complete absence of hemorrhage in the meninges and cerebral parenchyma; distention of spaces about the blood vessels and tearing or breaking up of nerve tissue from the heat generated. Only some cellular changes were noted. These studies of Hassin indicate that when the nervous system proper is exposed to extremely high currents, the tissue changes seem to occur on a purely mechanical basis. In patients in whom death has resulted and current has not passed directly through the central nervous system, most of the cerebral damage is circulatory.

Osseous Changes in Electrical Injuries.—Palugyay,[28] in 1924, called attention to certain osseous changes occurring in electrical burns. The most common such change that accompanies electrical injuries is bone atrophy of the particular extremity or portion of bone involved. Accompanying this atrophy is sclerosis or hypertrophy of the periosteum, sometimes with alterations of contour of the bone structure and rarifications in the shaft of the bone, occasionally with sequestrum formation.

This bone atrophy presents a typical picture in the decided lessening of the calcium content (halisterosis), and the extensive loss of calcium may involve all the bones of the injured extremity. This extreme atrophy may present itself as a defined picture several days after the injury. Associated with the loss of calcium content there may be cylindric sclerosis of the periosteum. This sclerosis may involve the bone structure even though the initial injury has not occurred in the soft tissues immediately adjacent to it.

The periosteal sclerosis may be a late manifestation and is similar to that observed in an osteomyelitic process. When first seen, it may conform closely to the shaft of the bone; later sclerotic tissue appears to be separated from the bone by a translucent zone. Consequently, a rather thick calcium deposit may appear along the shaft of the bone.

It is not certain whether the periosteal sclerosis (a) represents an inflammatory reaction, (b) results from direct injury to the cells of the periosteum, bringing about ossification, or (c) is caused by hemorrhage. Frequently a softening of the bone structure leads to contractural deformities of the extremities, with thickness of the cortex near the end of the process, often with actual sequestration of the necrotic bone.

Treatment.—Emergency treatment of shock in electrical accidents consists of immediate application of efficient artificial respiration, which is sometimes required for a considerable time. Cardiac massage is valuable if started within five minutes. Cardiac stimulants are also recommended, as well as prophylactic tetanus and gas antitoxin for some patients. According to McConnell,[14] "Numerous official bodies concerned with electric shock have recommended the 'prone pressure' method which should be continued until rigor mortis sets in." It must be remembered in clinical practice, however, that mechanical stimulation of the ventricles may produce fibrillation, so that, in attempted resuscitation by cardiac massage, care should be taken

not to apply this too vigorously.

It has been demonstrated that it is possible to revive a heart in fibrillation on rare occasions by intra-arterial or intracardiac injections of potassium and calcium salts. Wiggers[29] forced a potassium chloride solution into the ventricular cavities and occasionally restored vigorous beats. Hooker,[16] in animal experiments, injected 0.5 per cent solution of potassium chloride into the carotid artery. This was done under pressure, in order that a portion of the solution might reach the heart muscle through the coronary arteries. He pointed out that the potassium stops the heart, and when it is washed out a moment or so later, via the same route, by a solution of 0.023 per cent calcium chloride, the heart tends to resume its normal rhythm. The potassium chloride often failed, however, because potassium so depresses cardiac contractility and rhythm that calcium had to be used to induce the heart to beat again; in fact, calcium often makes the ventricles revert to fibrillation. Another drawback to the procedure for human subjects is that it is rarely available at the time of an electrical accident.

In the final analysis, the disappointing results that have followed the repeated attempts to resuscitate persons struck accidentally by electric shock are undoubtedly attributable to the fact that in the heart of man it is almost impossible to bring back the normal beat after the ventricles have been thrown into fibrillation. Fibrillation of the ventricles is also the cause of the sudden cardiac failure that occurs when blood clots or emboli cause blockage of the coronary circulation.

In analyzing the records of electrical accidents in England from 1912 to 1921, Scott Ram[30] noted that artificial respiration had been attempted in the majority of the cases. Of those who had received over 650 volts of electricity, 62.5 per cent recovered; only 39 per cent of those who had received under 250 volts were saved. This illustrates the fact that high voltages have a somewhat selective action on the respiratory apparatus and that artificial respiration is frequently valuable. It also demonstrates that the lower voltages act mainly upon the heart, resulting, as a rule, in irremedial fibrillation. Scott Ram concluded, therefore, that if artificial respiration is promptly applied the risks to life are much less with relatively high voltages than with lower ones.

As regards treatment of trauma to the nervous system, the care of coma in electrical accidents is the same as that for any cranial injury. This includes the use of hypertonic saline solution and the rectal injection of magnesium sulfate to relieve cerebral edema; lumbar puncture to reduce intracranial pressure, lower the temperature and withdraw the toxic products of electrolysis, and sedatives for agitation.

Post-mortem Observations.—In examining the body of a victim of an electrical accident, the following facts have been observed: if there has been a burn the lesion will probably have the characteristic features: a dry cuticle, a relatively insignificant wheal, and evidence of local capillary contraction causing clear white pallor of the surrounding zone. The lesion may be so small as to be difficult to locate, especially, for example, on the grimy, tough-skinned hands of a workman; or there may be no lesion at all.

Autopsy in cases of instant death from electric shock may reveal no abnormality whatever, for it is only necessary for a current to pass through the body that is sufficient to disable the respiratory and cardiac centers. When death has occurred from fibrillation, there is evidence of dilation of the chambers of the heart, sometimes with petechial hemorrhages under the pericardium and the ventricular endocardium, and often with gross pulmonary and venous congestion and cyanosis.

Microscopic study may show fragmentation of the muscle fibers of the heart in either form, with local capillary dilatation and petechial hemorrhages. Similar minute hemorrhages may be present in the brain.

COMMENT

Although trauma resulting from lightning has been integrated with that from electric current in the foregoing discussion, a few facts relative to dissimilarities are pertinent. In the first place, death from lightning is comparatively rare as compared to death from artificial electric current. They are important legally, however, for they present certain causes for suspicion of foul play. A victim may be found with disarranged clothing, split skin, fractured bones and a variety of curious skin markings. Metallic articles, such as buttons, keys, bracer parts, suspender buckles or other like items, are magnetized, and any such items found upon the victim are useful signs in the elimination of suspicion; they also indicate a possible lightning accident.

The treatment of electrical burns of the skin and other tissues does not fall within the scope of the present article, which is chiefly concerned with the physiologic effects of electricity upon the heart and nervous system in electrical accidents. I have discussed care of electrical burn lesions in two previous articles.[31] Comment upon the importance of the time at which definitive care should be undertaken, however, demands reemphasis.

Determination of the extent of burns immediately after an electrical accident is entirely presumptive, because of the tendency of the lesions toward necrosis and a progression of tissue damage. Conservative care, therefore, is imperative. For this reason, in my opinion, prognosis and decision as to the type, amount, and timing of definitive treatment should be delayed for several days, sometimes for weeks, depending upon the patient's physical condition and the degree of tissue destruction.

The literature reveals some difference of opinion with regard to the timing for definitive care of electrical burns. Some authors have voiced the opinion that immediate debridement, with grafting of skin without delay, is the procedure of choice in such cases. It is recognized that definitive care should be instituted as quickly as is feasible, in order that the burned area may not be left without cover for an unduly long period. The difference in characteristics, pathogenesis, and pathologic character of electrical burns as compared with thermal burns, however, make possible a waiting period, without danger to the patient, before debridement and definitive skin and bone grafting are attempted.

It is my opinion that a conservative therapeutic approach to the problem of electrical burns is vital. I have stated previously, that I "concur with those who adopt a 'hands off' policy whenever feasible in electrical burn patients, deferring primary repair or an amputation at least until the progression of tissue damage, bone sequestration, demarcation of dead tissue, deep necrosis, separation of sloughs, and the tendency toward progressive thrombosis, has been stabilized or has ceased . . ." Too often have I, like many others, seen a relatively simple-appearing electrical burn ultimately progress into a catastrophic one.

As regards individual susceptibility to electricity, the question has been debated. It has been argued by some authors, Jex-Blake,[32] for example, that individual idiosyncrasy of certain persons to electricity can be discounted. Nevertheless, my own observations and those of others have revealed evidence that arteriosclerotic or alcoholic persons, persons with thyroid disturbances and persons with oily skin are especially susceptible to electric shock.

SUMMARY

Trauma encountered in electrical accidents and the physiologic action and effects of electricity upon the body are discussed.

Comparative dangers related to the type and amount of current, the duration of contact and the path taken by electricity through the body in electrical accidents are described.

Ionization and the mechanism that regulates the physiologic reactions of cellular fluids, as well as the thermal effects of electric phenomena, are discussed.

The measure of resistance of the skin and other tissues to the passage of electricity is approximated, and reasons for variations in resistance of certain tissues are explained.

Severe, often fatal clinical changes noted in victims of electrical accidents are discussed, including injury, shock, ventricular fibrillation, effects upon the nervous system and osseous changes.

Emergency treatment is outlined, and reports are presented of human and animal studies of investigators endeavoring to reverse the fatal implications of electrically induced shock and ventricular fibrillation in man.

RÉSUMÉ

Il s'agit d'une étude sur les traumatismes lors d'accidents dus aux courants électriques. L'auteur analyse el décrit successivement les points suivants:

Dangers comparatifs des différents types et degrés de courants, durée du contact, trajet suivi par l'électricité à travers le corps.

Ionisation et mécanisme régulateur des réactions physiologiques des liquides cellulaires, effets thermiques de l'électricité.

Degré de résistance au courant électrique de la peau et des autres tissus, raisons des variations de résistance des tissus.

Modifications cliniques graves, souvent fatales, chez les victimes de tels accidents, y compris les lésions, le choc, la fibrillation ventriculaire; répercussions sur les systèmes nerveux et osseux.

Le traitement d'urgence est décrit et des rapports sont présentés sur les recherches en cours sur l'homme et sur l'animal, en vue de neutraliser les causes fatales du choc électrique et de la fibrillation ventricularie chez l'homme.

ZUSAMMENFASSUNG

Verletzungen, die durch Unfälle im Zusammenhang mit elektrischem Strom entstehen, und der physiologische Einfluss der Elektrizität auf den Körper werden erörtert.

Die der Art und der Menge des Stromes entsprechenden Gefahren, die Dauer des Kontakts mit dem Strom und dessen Verlauf durch den Körper bei Elektrizitätsunfällen werden beschrieben.

Die Ionisierung und der die physiologischen Reaktionen der Zellflüssigkeit regulierende Mechanismus sowie die Wärmeeffekte der elektrischen Erscheinungen werden erörtert.

Der Grad des Widerstandes der Haut und anderer Gewebe gegenüber dem Durchgang der Elektrizität wird abgeschätzt, und die Gründe für die Verschiedenheiten des Widerstandes gewisser Gewebe werden erklärt.

Schwere und oft tödliche klinische Veränderungen, die bei Opfern von Elektrizitätsunfällen auftreten, einschliesslich der äusseren Verletzung, des Schocks, der Fibrillierung der Herzkammer, der Einflüsse auf das Nervensystem und der Knochenveränderungen werden erörtert.

Die einzuleitenden therapeutischen Notmassnahmen werden umrissen. Ferner wird über Versuche am Menschen und am

Tier berichtet, die von verschiedenen Forschern ausgeführt wurden in dem Bestreben, die tödlichen Folgen des durch die Elektrizität hervorgerufenen Schocks und der Herzkammerfibrillierung beim Menschen aufzuheben.

RIASSUNTO

Vengono discussi i traumi da accidenti elettrici e le loro conseguenze sull'organismo.

Vengono descritti, inoltre, gli effetti dannosi in rapporto al tipo e all'intensità della corrente, alla durata del contatto e alle vie seguite dalla scarica attraverso il corpo.

Viene, poi, trattato la ionizzazione e i meccanismi che regolano le reazioni fisiologiche dei liquidi organici, come pure gli effetti termici dei fenomeni elettrici.

Viene fornita approssimativamente la misura della resistenza della cute e degli altri tessuti al passaggio dell'elettricità, e spiegata la ragione delle differenze di resistenza dei vari tessuti.

Vengono discusse le lesioni gravi, spesso fatali, riscontrate nelle vittime di tali accidenti, fra cui i traumi, lo shock, la fibrillazione ventricolare, gli accidenti nervosi e le lesioni ossee.

Viene descritto, infine, il trattamento d'urgenza, e vengono riferiti i tentativi sperimentali per rendere reversibili le conseguenze dello shock elettrico e della fibrillazione ventricolare.

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In important affairs we ought not so much to apply ourselves to create opportunities, as to make use of those which present themselves.

Imagination cannot invent so many different contrarieties as naturally exist in the heart of every individual.

When we cannot find contentment in ourselves, it is useless to seek it elsewhere.

We sometimes see a fool with wit, but never one with judgment.

A small degree of wit accompanied by good sense is less tiresome in the long run than a great amount of wit without it.

Jealousy is the greatest of all evils, and the least pitied by those who cause it.

Great souls are not those which have less passion and more virtue than common souls, but those only which have greater designs.

Those who are incapable of committing great crimes do not easily suspect others of them.

—*La Rochefoucauld*

Primary Multiple Gastric Carcinoma with Unusual Histologic Character

Report of a Case

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MULTIPLE malignant tumors in the human organism are not uncommon. The skin, the breast and the gastrointestinal tract are reported as the most commonly elected sites, but it is stated by many authors that multiple malignant tumors of the stomach are comparatively rare. With regard to the histologically different multiple gastric carcinoma I could find only 1 reported case (Schneider, 1940) in a recent review of the literature. It is justifiable, therefore, to report a case of my own because of its multiplicity and its unusual histologic character.

Report of Case

A farmer aged 55, was admitted to the First Surgical Clinic of Istanbul University on June 9, 1956, complaining of dysphagia, epigastric pain and severe loss of weight. About a year earlier he had begun to have difficulty in swallowing solids and mild epigastric pain. He lost his appetite, particularly for meat, and could swallow only fluids. He had had two or three attacks of hematemesis and melena.

Physical examination revealed the patient to be emaciated, with loss of subcutaneous fat and a pronounced diminution of skin tonicity. Palpation revealed no abnormality except slight tenderness at the epigastrium, near the xiphisternum.

The patient's general condition was considerably deteriorated because of frequent vomitings, which occurred regularly after meals, and he had lost 1 Kg. in weight, over the previous two months. Apart from the obvious loss of weight, examination provided merely negative evidence, and there was no detectable metastasis from the suspected carcinoma.

The value for hemoglobin was 48 per cent. The red blood cells numbered 2,280,000, and the white blood cells 4,800, per cubic millimeter.

The Wassermann and Kahn reactions were negative. A fractional test meal revealed hypoacidity and blood in the gastric contents.

Barium meal examination revealed a filling defect of the lesser curvature of the stomach, near the cardia. The emptying of the stomach was normal.

On laparotomy a malignant tumor of the stomach was discovered and a total gastrectomy performed, and the patient recovered uneventfully.

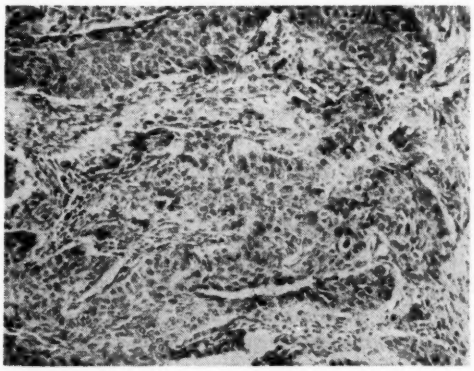

Fig. 1.—Photomicrograph of section taken from tumor of lesser curvature near cardia, showing epidermoid carcinoma.

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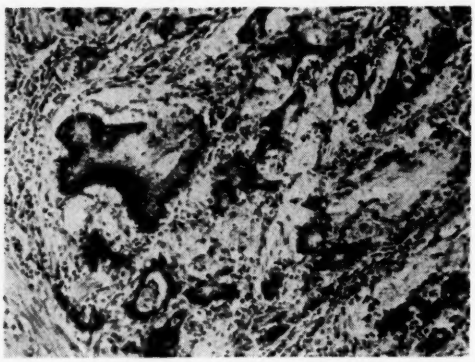

Fig. 2.—Photomicrograph of section taken from the tumor on lesser curvature near pylorus, showing adenocarcinoma.

Pathologic Picture: Macroscopically the totally resected stomach showed (1) a projecting fungoid growth 5 cm. in diameter, on the lesser curvature near cardia, involving all coats and with one enlarged cancerous lymph gland in the adjacent omental attachment; (2) another well defined growth 1.5 cm. in diameter, on the lesser curvature, near the pylorus, and (3) normal, healthy intervening gastric wall.

Microscopic section through the first growth showed highly differentiated epidermoid carcinoma (Fig. 1). Section through the second tumor showed well differentiated adenocarcinoma (Fig. 2).

CONCLUSION

It is useless to speculate much about the case here reported, but the author does not consider it a mere coincidence. It has some significant bearing on malignant neoplasms of the stomach. Possibly multiple malignant tumors of the stomach have some relation to benign gastric tumors, as is the case in carcinoma of the rectum, but the author was unable to detect macroscopically any other benign tumor located separately on the mucous membrane.

The tumor was not a mixed type of carcinoma, nor was it adenoachonthoma, because each tumor had its own histologic characteristics in each site, and the intervening gastric wall was absolutely healthy.

It is the author's impression that local conditions are far from explaining the cause of multiplicity. It is mandatory, therefore, to accept the influence of some unknown systemic factors.

CONCLUSIONI

Non è il caso di trarre considerazioni generalizzate dal caso presentato. L'A. tuttavia non crede che esso rappresenti una pura coincidenza—e d'altra parte l'osservazione fornisce qualche insegnamento sui tumori maligni dello stomaco. E' probabile che i tumor primitivi maligni multipli dello stomaco siano in rapporto genetico con tumori benigni come avviene nel rétto; ma nel caso presentato non fu possibile trovare alcun tumore benigno nello stomaco. La lesione non era nè un carcinoma nè un adeno-acantoma; ognuno dei tumori aveva caratteristiche istologiche proprie e la parete interposta era assolutamente normale.

Lautore è d'avviso che le condizioni locali non possono spiegare la molteplicità dei tumori; si deve, tuttavia, accettare l'ipotesi che esista qualche fattore patogenetico ignoto di carattere sistemico.

CONCLUSIONES

Sería inútil tratar demasiado sobre el caso que se presenta, pero el autor no lo considera como una simple coincidencia. De él podemos aprender algo importante respecto a las neoplasias de estómago.

Posiblemente hay cierta relación entre los tumores malignos múltiples del estómago y los tumores benignos del mismo,

tal como sucede en el carcinoma de recto; sin embargo el autor no pudo hallar ningún tumor tumor benigno en otras partes de la mucosa gástrica, que fuesen visibles macroscópicamente.

El tumor no era un carcinoma de tipo mixto, ni se trataba tampoco de un adenoacontoma, porque cada tumor presentaba sus propias características histológicas en el lugar donde se asentaba, y el resto de la mucosa era absolutamente normal.

Para el autor, las circunstancias locales no son suficientes para explicar esta multiplicidad. Por tanto, debemos reconocer la influencia de algún factor desconocido en el proceso.

SCHLUSSFOLGERUNGEN

Möglicherweise besteht eine Beziehung zwischen multiplen bösartigen Magengeschwülsten und gutartigen Magentumoren, wie es beim Karzinom des Mastdarms der Fall ist. Der Verfasser war jedoch ausserstande, bei seinem Kranken makroskopisch eine andere gutartige Geschwulst an einer anderen Stelle der Magenschleimhaut zu finden. Er hält es für zwecklos, sich auf grosse Spekulationen einzulassen, glaubt aber nicht, dass es sich in seinem Falle nur um ein zufälliges Zusammentreffen handelt.

Bei seinem Kranken lag weder eine Mischform eines Karzinoms noch ein Adenoacanthom vor; jeder Tumor hatte an seinem Sitz seine eigenen histologischen Grundzüge, und der dazwischen liegende Abschnitt der Magenwand war völlig normal.

Der Verfasser hat den Eindruck, dass örtliche Zustände die Ursache der Multiplizität bei weitem nicht erklären können und glaubt daher, dass man nicht umhin kann, den Einfluss eines unbekannten systemischen Faktors anzunehmen.

CONCLUSIONS

Il est inutile de méditer longuement sur le cas ici rapporté, mais l'auteur ne le considère pas comme une simple coïncidence. Il a une certaine signification du point de vue de nos connaissances concernant les néoplasmes malins de l'estomac. Il est possible que des tumeurs malignes multiples aient un rapport avec des tumeurs gastriques bénignes comme c'est le cas pour le carcinome du rectum, mais l'auteur a été incapable de déceler macroscopiquement une autre tumeur bénigne située à distance sur la muqueuse.

La tumeur n'appartenait pas au type carcinome mixte, ce n'était pas non plus un adéno-acanthome, car chaque tumeur présentait des caractéristiques propres et la gastrique les séparant était absolument saine.

L'auteur a l'impression que les conditions locales sont loin d'expliquer la cause de la multiplicité des tumeurs, et qu'il est nécessaire d'accepter la thèse de l'influence d'autres facteurs organiques inconnus.

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He is a learned man who understands one subject; a very learned man who understands two.

—*Emmons*

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Chemotherapy and the Clinician in Our Time-Space World

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BROOKLYN, NEW YORK

TO answer the many profound questions that logically follow such a formidable title is beyond my ability. I hasten to note, however, that valuable scientific data have accumulated and have been used clinically to make definite alterations in many forms of modern medical practice. These recent advances have made technical simplicity the very core of therapy for most forms of infectious diseases and have made new chemotherapeutic tools immediately available to the medical and dental professions.

In order to integrate accurately the contribution of the basic scientists and the clinician it will be necessary to define the elements noted in the title of this paper. At the outset, clarification for both physician and surgeon is the first step toward intelligent use of the great chemotherapeutic possibilities now available. This approach is directed toward bacteria, the basic cause of infectious disease throughout the world. Physicians, surgeons and most specialists should be primarily interested, since it will unify the profession rather than contribute further to its fragmentation. The specialist is infinitely better qualified as a therapist if he recognizes the damage that can follow clinical indifference to present-day infections with resistant bacterial strains. For the last decade certain principles of multiple chemotherapy that have been available to prevent or retard the emergence of new man-made bacterial species, more commonly known as resistant strains or bacterial mutants, have been clinically ignored. The failure of medical educators to recognize more promptly the contributions of the basic scientists suggests that this powerful source for disseminating medical knowledge in the United States needs to be reappraised.

Much is heard of communication and the speed of communication throughout the world, and it might be wise to examine very critically just what is being communicated. I shall offer a specific illustration of the profound damage already done by failure to integrate clinical practice with the contributions of biologists especially interested in bacterial genetics. Within the last five years we sent to the Orient large amounts of Isoniazid to help cure patients with pulmonary tuberculosis, ignoring irrefutable clinical and experimental evidence that this drug, used alone, would produce only temporary relief, since it would cause the rapid (one step) development of resistant bacterial strains that could ultimately kill the patient, and if not, could spread throughout the community and, with accelerated communication, throughout the world.

Further danger of indifference to the contributions of the basic scientists in microbiology is noted by current reports from New Delhi of a meeting of the International Union Against Tuberculosis, attended by 875 delegates from 60 countries, in which the conflicting opinions of the authorities who direct the treatment of millions of Asians suffering from tuber-

Read at a meeting of the Mid-Atlantic Regional Division, United States Section, International College of Surgeons, White Sulphur Springs, West Virginia, Feb. 10-13, 1957.
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culosis gave eloquent testimony to the lack of the fundamental biochemical and bacterial genetic concepts needed to direct so broad a program for health and the lives of millions.

These specific examples of damaging and lethal information disseminated by world-wide agencies for rapid communication indicate the need for a very critical review of what is being communicated in the fields of medicine and surgery.

Dr. R. N. Mitra, using multiple chemotherapeutic principles at the Calcutta Medical Center, confirmed my earlier experience in preventing resistant strains of staphylococci from emerging and cured many previously unconquerable forms of chronic osteomyelitis by combining a detergent solvent, di-octyl sodium sulfosuccinate, with penicillin and applying it directly to the pathogen in the infected bone. The same principle has already been used in the treatment of pulmonary tuberculosis and tuberculous sinuses, with a combination of (1) streptomycin and Isoniazid, administered parenterally, (2) PAS and INH, administered orally, and (3) streptomycin and Isoniazid administered by inhalation as an aerosol mist by dissolving it in a detergent solvent, a quaternary ammonia compound, to topically deliver into the periphery of the lung, a dose lethal to Mycobacterium tuberculosis. By applying these microbiologic genetic principles clinically, one should be able to achieve unanimity rather than conflicting opinions as to the treatment of tuberculosis.

Although I have selected the resistance of the tubercle bacillus to Isoniazid because tuberculosis has been man's greatest killer for thousands of years, one could easily note the clinical damage due to other chronic infectious disorders, such as chronic osteomyelitis and most pulmonary suppurative infections, that has resulted from using a single drug, such as penicillin or streptomycin, instead of combining them in suitable multiple therapeutic units.

Even this superficial review indicates that, throughout the world, the physician who maintains the traditional doctor-patient relation can now treat formidable disease and further cement this wholesome philosophy with scientific biologic-therapeutic tools to support him. For the surgeon it most certainly demands a searching reexamination of his surgical principles and technic, the result of which will invariably tend toward a pronounced shift to conservative measures.

Physicians unfortunately fail to realize that nowadays the two most powerful indivisible units in the universe—the biologic gene and its physical counterpart, the atom, both with limitless potential energy—are now available to man for the first time, and that the benevolent or malevolent manner in which he uses them can affect all life on this planet, including his own.

An infinitely clearer understanding of man in the world in which he now lives is needed to help the physician treat his patients today. He must see mankind as the most interesting part of a great evolutionary phenomenon and he must see bacteria as also involved in the struggle for survival and daily playing their timeless role against man, the host. To anchor one's clinical and therapeutic vision on the basic science of biology is to obtain a better balanced perspective on man as "the only organism capable of further major transformation or evolutionary advance" (Huxley). When one realizes that man lived a million years ago, developed a primitive culture and has evolved to his present state in spite of a biologic conflict with microbes that existed two billion years ago, the physician who uses any atomic or genetic agent to alter this slow, orderly biologic course of evolution must give infinitely deeper consideration to the catastrophic

consequences that may follow therapeutic indifference and must turn promptly to sound biologic facts for his clinical guidance. Multiple or combination chemotherapy should be used systemically and topically, always with the sound curative purpose of delivering a lethal dose to the pathogen. No resistant strains should be left to spread not only through the immediate community but throughout the world.

Consideration of what has been done in the past two decades can help to solve many modern clinical problems. One can state briefly that modern chemotherapy started in the early part of this century, when Paul Ehrlich treated syphilis with the arsenicals. Ehrlich was followed three decades later by Domagk and his work with the sulfa drugs, then came the contributions of Fleming, Florey and Chain with regard to penicillin. American technical "know-how," which made possible the production of tons of penicillin at a critical period in Western civilization, is the crowning achievement of the industrial revolution started by the British with their invention of the steam engine.

It was soon recognized bacteriologically that by using both sulfa and penicillin one may destroy 99.9 per cent of the pathogens but that a resistant strain could develop and spread from the treated patient. The use of one drug only has persisted for over a decade; relatively recently it was suggested that if one broad-acting antibiotic were used this resistance could be controlled. Unfortunately this also failed and the profession is right back in 1944, when bacterial geneticists advised the use of certain multiple combinations of drugs with the specific therapeutic principle of preventing the emergence of resistant bacterial strains or species inimical to man's health and welfare. In addition, they advised the incorporation with these chemotherapeutic combinations of a detergent solvent, or wetting agent,* that had limited inhibiting bactericidal effects but in combinations produced a bacterial synergism with a lethal effect greater than its total additive efficiency. To this great clinical advantage was added a spreading or diffusion into microscopic areas that could not be efficiently reached by any of the current radical surgical technics for infectious diseases, which clearly indicated the wisdom of reevaluating all surgical procedures employed in the treatment of infections. Clinical experience of the last decade gives abundant evidence in support of the laudable surgical principles set forth by Finland and Jones** in the following quotation:

"Relation to Surgery. — Finally, it is worth noting that staphylococcal infections, which historically have fallen within the province of the surgeons, like many other types of infections formerly within their domain, have suffered to some extent by the dichotomy of the types of therapy available for the management of such cases. This has resulted, on the one hand, in a failure on the part of many surgeons to recognize the full potentialities of conservative, nonsurgical, treatment which the rational use of antibacterial agents permits and, on the other hand, in either the persistence of the medical man in continuing treatment in the face of obvious failure or, on the other extreme, in his willingness to give up too soon when faced with pressure from impetuous surgical colleagues. It is this state of affairs that still permits many otological surgeons to perform large numbers of mastoidectomies, and thoracic or general surgeons to deprive many patients of part of one or more of their ribs, while others among their col-

*The detergent used for osteomyelitis is di-octyl sodium sulfosuccinate; for pulmonary inhalation the detergent used is benzal konium chloride.

**Finland, M., and Jones, W. F. Jr., Staphylococcal Infections Currently Encountered in a Large Municipal Hospital: Some Problems in Evaluating Antimicrobial Therapy in Such Infections, Ann. New York Acad. Sci. 65:191 (Aug. 31) 1956. (From the Thorndike Memorial Laboratory and the Second and Fourth (Harvard) Medical Services, Boston City Hospital, and the Department of Medicine, Harvard University.

leagues, with at least equal skill but with more patience and perseverance, rarely find it necessary to perform such operations except under unusual, specific, and well-defined circumstances."

My experience and that of others also reveal that it is often unnecessary to amputate for chronic osteomyelitis or to perform pneumonectomy, lobectomy, or thoracoplasty "except under unusual, specific, and well-defined circumstances."

The immediate translation of these principles into clinical terms means that many patients who would have been doomed to early death or a life of chronic invalidism from unconquerable infectious disease are now able to live healthy, useful lives and that many of the fears, frustrations and miseries associated with chronic disease have been eliminated. And when these cures are effected with minimal surgical mutilation many patients will walk on their own legs, use their own arms and breathe with two lungs instead of living with scarred, mutilated bodies. Fortunately, this has been adequately confirmed in previous publications, and it is hoped that this biogenic therapeutic concept will be broadly promulgated. Nor is the body alone the beneficiary; together with the control of infectious disease a new psychosocial culture can evolve, with infinitely deeper humanitarian implications than have been hitherto imagined.

SUMMARY

Man has slowly evolved in an ever-changing environment to an advanced point in his understanding of the two elements of the universe, the atom and the gene, so that he is now responsible for the world we live in. At the same time, he has radically altered the slow, ever-changing biologic environment of all plant and animal life on this planet, from unicellular microbes to man, altering the biologic timetable for the past two billion years. Although nature, from man's point of view, has adjusted slowly to environmental changes, the gene has become the trigger mechanism for dangerous alterations in the slow, orderly and natural process.

Antibiotics have been used for a decade to cure the sick, but the profession has been clinically indifferent to the role of the gene in producing new resistant species of bacteria. Since some patients with previously unconquerable infectious diseases are now restored to health and have become useful members of society in India, Holland, France and the United States, the use of multiple chemotherapeutic agents to retard or prevent the emergence of resistant strains should be considered the method of choice in the treatment of all infectious diseases. Radical mutilating surgical therapy should always be withheld until the therapeutic technic described has been carefully investigated. Since, according to Huxley, man is at present the only organism able to change with evolutionary advances, his role in altering life on this planet demands profound study, and the physician must assume a vital part of this grave responsibility.

RÉSUMÉ

Les antibiotiques sont utilisés couramment depuis une dizaine d'années, mais il n'a pas été accordé assez d'importance au rôle des gènes dans la production de nouvelles espèces de bactéries résistantes. Etant donné que certains malades jusqu'alors condamnés peuvent être sauvés depuis l'ère des antibiotiques, l'utilisation d'agents chimiothérapiques multiples pour retarder ou prévenir les souches résistantes devrait être considérée comme la méthode de choix dans le traitement de toutes les maladies infectieuses. Ce n'est qu'en dernier ressort que l'on recourra à une intervention mutilante.

Dans un milieu en constante évolution, l'homme a lentement progressé dans sa compréhension des deux éléments de l'univers, l'atome et le gène; aussi est-il donc maintenant responsable du monde dans leguel nous vivons. Il a radicalement modifié le lent rythme biologique de la vie végétale et animale sur cette planète, et il a transformé l'horaire biologique de cinq billions d'années passées. L'hémme étant actuellement le seul organisme capable de contrôler l'evolution biologique son rôle, en modifiant la vie sur cette planète, est toutpuissant; aussi le médecin et le chirurgien doiventils assumer une part vitale de cette grande responsabilité.

RESUMEN

Los agentes antibióticos han sido usados durante una década para curar enfermos pero ha habido demasiada indiferencia ante el papel de los genes en la producción de nuevas especies resistentes de bacterias.

Puesto que mucho enfermos con enfermedades infecciosas que antes se consideraban incurables han recuperado la salud y han vuelto a ser miembros útiles de la sociedad el empléo de diferentes agentes quimioterápicos para prevenir o retardar la aparición de cepas resistentes debe ser considerado como el método de elección en el tratamiento de todas las enfermedades infecciosas.

Las técnicas quirúrgicas mutilantes radicales deben ser empleades con gran prudencia hasta tanto que la técnica terapeútica descrita haya sido cuidadosamente investigada.

Dentro del ambiente siempre cambiante que le rodéa el hombre ha evolucionado lentamente hacia un punto avanzado en el entendimiento de los dos elementos del universo, el atomo y el gene, llegando a biológico en el que la vida animal y vegetal evoluciona siempre lentamente y ha cambiado el curso cronológico de los últimos cinco mil millones de años. Y ya que el hombre es el único ser capaz de controlar los cambios de la evolución su papel, alterando la vida sobre el planeta, es de lo mas importante y por eso el médico y el cirujano deben asumir una parte vital en esta grave responsabilidad.

ZUSAMMENFASSUNG

Seit zehn Jahren werden antibiotische Mittel zur Heilung von Kranken verwendet, ohne dass man sich klinisch viel darum kümmert, welche Rolle die Erbanlage bei der Schaffung neuer resistenter Arten von Bakterien spielt. Da manche Patienten mit früher unheilbaren Infektionskrankheiten heute völlig wiederhergestellt und der Gemeinschaft als nützliche Mitglieder wieder zugeführt werden können, sollte bei der Behandlung aller Infektionskrankheiten die Verwendung mehrfacher chemotherapeutischer Mittel zur Verzögerung oder Verhütung der Entstehung widerstandsfähiger Bakterienstämme als das Verfahren der Wahl angesehen werden. Radikale verstümmelnde operative Eingriffe sollten nicht ausgeführt werden, bevor die hier beschriebene Behandlungstechnik sorgfältig untersucht worden ist.

Unter ständig wechselnden Lebensbedingungen hat sich der Mensch langsam zu einer Stellung entwickelt, die ihm ein weites Verständnis der beiden Elemente des Weltalls gestattet, nämlich des Atoms und des Gens, und er ist infolgedessen heute für die Welt, in der wir leben, verantwortlich. Er hat die langsame, ständig wechselnde biologische Welt für alles pflanzliche und animalische Leben auf diesem Planeten radikal verändert und den für die letzten fünf Milliarden Jahre gültigen Stundenplan abgewandelt. Da der Mensch zur Zeit das einzige Wesen ist, das einen Einfluss auf Veränderungen der Entwicklung ausüben kann, ist die Rolle, die er beim Verändern des Lebens auf diesem

Planeten spielt, von grösster Bedeutung, und die Ärzte und Chirurgen müssen einen wesentlichen Teil dieser schweren Verantwortung übernehmen.

RIASSUNTO

Per una decina d'anni gli antibiotici sono stati usati per combattere le malattie, ma senza tener conto dell'importanza del gene nella produzione di specie batteriche resistenti. Dal momento che molti malati, un tempo considerati incurabili, vengono ora rimessi in salute e restituiti alla società, si deve considerare come metodo migliore quello che consente una scelta fra i vari agenti antibiotici allo scopo di evitare la comparsa di ceppi batterici resistenti. Anche gli interventi chirurgici mutilanti devono essere ritardati fino a che non si ser responsable del mundo en que habita. El ha transformado radicalmente el mundo siano espletati tutti i tentativi possibili in questo senso.

Vivendo in un ambiente in continua evoluzione, l'uomo ha aumentato le sue conoscenze sugli elementi dell'universo, gli atomi e i geni, cosicchè egli è ora responsabile del mondo in cui vive. Egli ha modificato radicalmente il mutevole mondo biologico per quanto riguarda la vita degli animali e delle piante sul nostro pianeta e ha modificato gli orari biologici degli ultimi cinque bilioni di anni. Poichè l'uomo è ora capace d modificare l'evoluzione, i suio compiti sono divenuti importantissimi, e i medici devono assumere la loro responsabilità in questo campo.

SUMARIO

Por uma década os agentes antibióticos têm sido empregados na cura de enfermos, porém um indiferentismo clínico excessivo no papel do gen em produzir novas espécies de bacteria mais resistentes, têm se observado. Desde, que pacientes com infecçóes préviamente inconquistáveis tem a saúde restaurada e tornaram-se membros atívos da sociedade, o uso de múltiplos agentes chemo-terapeuticos para retardar ou prevenir a emergência de espécies resistentes deve ser considerado o método de eleição no tratamento de todas as enfermidades infecciosas. Procedimentos cirúrgicos radicais e mutilantes deve serpadiados até que a técnica terapêutica descrita tenha sido cuidadosamente investigada. Na continua mudanca de ambiente, o homem evoluiu e atingiu um ponto em que o seú conhecimento dos dois elementos do universo, a átomo e o gen, que é agora responsável pelo mundo em que vivemos. O homen alterou radicalmente olento e sempre em evolução mundo biológico para toda vida animal e vegetal dêste planeta eohorário biológico doe passados cinco bilhões de anos. Uma vez que o homemeé no presente o único organismo capaz de contrôlar mudancas evolutivas, seu papel em alterar a vida nêste planeta é toda importante e o medico e cirurgião devem assumir parte vital deste responsabilidade grave.

There is no national science, just as there is no national multiplication table; what is national is no longer science.

—*La Bruyére*

Emergency Features of Head Injury

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THE general features of head injury are well known and include the following: (1) concussion, that state of head injury followed by loss of consciousness, with eventual full recovery and without neurological residua; (2) contusion, actual brain trauma with bruise, ecchymosis and anatomic gross changes, usually manifested by more delayed recovery and at times focal transitory neurologic signs; (3) cerebral laceration, ordinarily associated with more profound stupor, an altered conscious state, grossly bloody spinal fluid, and more marked neurologic defects, with slower recovery or death, and (4) fractures of the base, usually associated with temporary loss of consciousness, bleeding from one or both ears and/or oral or nasal cavities associated with more or less basal brain trauma and recovery or nonrecovery, depending upon the severity of the last-mentioned. The usual management consists of observation, nursing care, the administration of prophylactic antibiotics and sedatives, and physiologic fluid maintenance. The patient will usually recover or die regardless of specific care, and time and nature's healing power are in most instances adequate treatment. Dehydrating agents seldom have value, and usually the patient is best served by intelligent neglect.

The particular problems with which this paper is concerned are those which require prompt recognition and specific treatment, which are often life-saving. These include the following five states:

1. Unconsciousness with tracheal obstruction due to retained secretions or massive maxilofacial injuries, which requires an airway, preferably a tracheotomy, at once.

2. Unconsciousness with injury to the neck, including cervical spine fracture-dislocation of the cervical portion of the spine with damage to the spinal cord, either present or impending. Prompt diagnosis and immobilization are necessary.

3. Extradural hematoma. This demands immediate craniotomy.

4. Compound fractures of the vault. These require early débridement and repair.

5. Chronic subdural hematoma. When this is suspected, even though late, prompt surgical intervention is warranted.

When one is brought to see an unconscious patient with head injury, two problems are equally important, namely, tracheal obstruction and injury to the neck. The patient is often severely anoxic, retching, full of fluid and in a difficult situation owing to inability to perceive the tracheal secretion or extensive bleeding into the nasopharynx that is associated with severe maxilofacial trauma. An immediate airway is necessary, and if the basic cause of such an injury is severe enough to lead one to expect prolonged unconsciousness, the preferable treatment is early tracheotomy. This not only enables the peripheral and cerebral oxygen content to be improved, which results in physiologic improvement, but does away with retching, straining and threshing about and thus makes management simpler. An additional benefit to be derived from tracheotomy is a byproduct—the fact that such a patient always has someone immediately at the

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bedside, either a member of the family or a competent member of the nursing staff, involved in the technical features of a tracheotomy, such a person will give much more effective general nursing care in all the many details which are important, such as general body hygiene, frequent changes of position and the observing and reporting of vital signs. It is surprising how often a severely injured person can be placed in a ward while having great trouble with secretion and, as long as nothing is mandatory to be done in the way of nursing, can be ignored as a serious but untreatable problem.

The second feature mentioned, equally important with the first, is unsuspected damage to the cervical portion of the spine and cord. It is quite common in cases of forceful injury, particularly at the vault, to observe associated fracture-dislocations of the cervical portion of the spine at any level. The unconscious patient cannot tell of this, and there have been numerous instances in which it was unrecognized. During the original examination it is appropriate to determine, if possible, the state of muscle power of all extremities, either by cooperation, if the patient is able, or otherwise if he is not. Rather severe noxious stimuli to an extremity, even though the patient is moderately comatose, will produce withdrawal reaction in the member and give one considerable information as to presence or absence of dysfunction of the spinal cord. A patient with such an injury is often lying with the hands and forearms flexed on the chest, owing to the frequency of dislocation of the sixth cervical vertebra. This position of reclining should always arouse suspicion. In addition, simple palpation of the neck, with intermittent pressure over various cervical spinous processes, will almost uniformly, even from the markedly stuporous patients, evoke a reaction of pain withdrawal if one of these vertebrae is injured in any significant degree. In the presence of local signs referable to the neck findings or suggestive observations referable to the spinal cord, it is urgently important to obtain a lateral roentgenogram of the spine with the patient in the dorsal position. When any movement of the patient is necessary, however, an adequate number of persons should assist, and one person should maintain immobilization of the neck in traction. It is inadvisable and unimportant to take any additional films of the cervical portion of the spine at this time, particularly if fracture deformity is demonstrated. To "position" the patient for oblique and open-mouth views is not helpful in treatment and is apt to aggravate any bony disalignment and thereby increase potential damage to the spinal cord.

If any of the aforementioned observations are made, the patient should be immobilized at once in some type of traction. A halter is permissible and perfectly acceptable, though skeletal traction with Crutchfield tongs is more desirable. It is not only more effective but considerably more comfortable and simpler with regard to nursing management. The tongs are harmless and are simple to install.

Extradural hematoma is a lesion encountered often enough to make one continuously suspicious of it, since it develops early and is rapidly progressive and uniformly fatal unless surgical treatment is undertaken promptly. This lesion occurs as a result of fracture of the squamous portion of the temporal bone, in which the sharp edges lacerate the middle meningeal artery lying on the external surface of the dura at this site. This allows the artery to bleed freely and under arterial pressure into the extradural space, with the formation of a tumor of considerable size in a relatively short time, usually a few hours. This is accompanied by displacement of the dura and brain, stretching of the third

nerve with the development of third nerve paralysis, stupor, bradycardia, weakness of the opposite extremities and death. Clinically the patient most commonly has a relatively mild injury of the lateral aspect of the head, often no more than a small contusion or hematoma, with minimal loss of consciousness and early recovery to normal, becoming asymptomatic in a period of minutes or half an hour. This is the deceiving element, for on examination at this time there are no abnormal signs whatsoever. This is one reason for overnight hospital or other critical observation of the unconscious patient with an injury to the head. A baseline of future observations requires inspection of the pupils to detect any focal neurologic sign, and determination of the presence of a normal or somewhat slow pulse rate. A roentgenogram of the skull is highly desirable, as a temporal fracture puts one particularly on guard for this syndrome. Usually a few hours intervene during which the patient is normal, but if he is left alone he may well be found dead during the night or the next morning. If observations are made serially, there develops gradually evidence of intracranial pressure, characterized by headache, vomiting, progressive bradycardia, the appearance of a dilating pupil on the side of the lesion and weakness of the opposite extremities, with Babinski signs and rapid deterioration. This is the classic course, though there are unusual cases in which such an injury is coupled with a more profound head trauma and the unconscious or disoriented state persists, the so-called "lucid interval" not being observed.

The failure of the lucid interval to appear should not lead one away from searching for the extradural hematoma in all instances of trauma to the head. When such a diagnosis is made, and this customarily is within the first twelve hours after injury, the management of the patient for the next hour may mean the difference between complete recovery and death. This management should include great haste in preparing for immediate craniotomy. It is wrong to entertain the thought of transferring such a patient to some other hospital or obtaining consultation from a distance. The important thing is to get a cranial defect in the temporal bone on the injured side and the side on which the pupil is dilating. The defect in the skull must be large enough, usually 1½ to 2 inches (3.7 to 5 cm.) in diameter, for the large extradural jelly clot to extrude itself through the opening and be removed by suction or other means. When this is done there will be apparent arterial bleeding from the open middle meningeal artery directly into the wound. Hemostasis and thorough irrigation of the clot, followed by closure, are all that are required to produce a dramatic and life-saving recovery. If it has been necessary to sacrifice an unusual amount of bone to accomplish this, nothing of consequence is lost. If this cosmetic feature is later on disturbing, plastic repair is of small magnitude.

Compound Fractures of the Vault: These are associated with more or less generalized brain trauma and each should be judged on its own merit. In general, the more severe the general brain injury, body shock and associated injuries, the longer the specific treatment of the compound fracture should be delayed. The early requirements are simple hemostasis, superficial cleansing and the application of dressings, with general treatment of associated injuries. Satisfactory films of the skull should be obtained, to allow for better planning of the bony débridement. In most instances the patient is best placed in bed for a number of hours, given antibiotics and allowed to recover from the immediate trauma and become physiologically stabilized. Then, in a more elective manner, he can be taken to the operating room and appropriate débridement and toilet of the

wound carried out, along with necessary repair. With modern antibiotic therapy this can well be delayed up to two or three days if necessary, although it is desirable to do it within twelve to twenty-four hours if practicable and reasonable. For one reason or another, the patient's condition is often not suitable for general anesthesia immediately after the injury, whereas with the passage of some hours and no oral intake he becomes a safe anesthetic risk. The details of wound repair, management of depressed fragments and laceration of the dura or brain are based on the usual surgical principles of débridement. It is seldom necessary to consider plastic reconstruction at this stage and certainly not at all wrong to defer it for a secondary procedure. Often there is considerable generalized brain trauma as well as associated cerebral edema, which make unwise any final plastic procedure at this time.

Chronic Subdural Hematoma: This is an interesting and not uncommon lesion observed by all members of the profession and at times rather remotely related, temporally, to the original head trauma. These hematomas become clinically significant at any time from three or four days to one year after the injury.

The variation in time is a factor in the magnitude of associated brain injury at the outset, as are signs of immediate subdural bleeding followed by physiologic developments that insidiously transform a small subdural accumulation of blood into a large and often encapsulated one, with gradual physiologic embarrassment of the brain due to compression. All of these factors "work" in different and, at times, unknown ways. What happens anatomically is that when the head is injured, sometimes even trivially, there occurs tearing of the veins between the cortex and the dura, allowing varying amounts of venous blood to ooze between the arachnoid and the dura. This, in itself, may be associated only with transitory headaches, short-lived confusion, relative recovery and, later, the development of an intracranial pressure disorder, which may be somewhat obscure. Statistically it is significant that a considerable number of patients with this condition are either acutely or chronically alcoholic. It is well to suspect this lesion in a patient known to be alcoholic, from whom the details of history are at no time very reliable but who insidiously comes to behave in a peculiar manner, have headaches, be drowsy and not his usual self, without a focal neurologic defect. The subdural blood aforementioned, after some hours or days, becomes somewhat solidified and forms a jelly-like clot. At times this becomes totally liquefied, and the subdural space on that side or, at times, on both sides is filled with a black oily material that gradually increases in size and produces a slow-growing intracranial tumor. In other instances this jelly clot does not dissolve but becomes semiencapsulated in a membrane, which apparently is semipermeable and allows fluid to enter it but not escape, thus producing, over a long period, a slowly progressive intracranial tumor.

The cardinal features are those of suspected injury to the head, followed by improvement for a period of days, weeks or months and then by gradually deteriorating intellectual function, with or without focal neurologic signs. The compression and shifting of the brain structures due to a slow-growing lesion is often so insidious that there is enough compensation to permit full neurologic function, but as the time approaches when the symptoms direct particular attention to the head this level of physiologic reserve of the brain tends to reach its saturation point, and there is a critical level, beyond which death occurs. Thus, when such a lesion is suspected with any reasonable certainty, prompt operative, diagnostic and therapeutic measures are desirable. In a number of instances,

such persons have been admitted to hospitals with a diagnosis of subdural hematoma rather strongly suspected, yet seemingly not in too bad a condition. They are allowed to lie about for investigation of medical or other reasons, or to await an appropriate time on the schedule. In the meantime they are given the customary fluids for hydration or blood transfusion, and these various maneuvers are often enough to increase blood volume and cerebral swelling to the point at which immediate death may occur in a person who does not seem otherwise ill. These are the fundamental reasons why a high degree of suspicion should be maintained with regard to chronic subdural hematoma in making a diagnosis. Having suspected its presence, one should proceed immediately to establish the diagnosis and effect a cure. Such a lesion can sometimes be handled by making simple burr holes, through which the liquid material is easily aspirated, but in a number of instances a larger craniotomy flap is required, because the chronically clotted material must have the larger opening for removal and cleaning out of the subdural space.

SUMMARY

The unconscious patient needs immediate attention for recognition and prompt treatment of tracheal obstruction, preferably with tracheotomy if this unconsciousness is expected to be prolonged. The unconscious patient equally needs immediate evaluation of the likelihood of injury to the neck, with or without involvement of the spinal cord, and proper diagnostic measures and immediate immobolization with traction if this is present. The extradural hematoma is an early and rapidly killing lesion that requires critical serial observation of the slightly or seriously injured person, and prompt diagnosis and surgical treatment are necessary to effect recovery, in contrast to the uniformly fatal outcome when treatment is delayed. Patients with compound fractures of the vault, although they merit early attention, are less urgently needed in the operating room and are better served by early general supportive measures and an opportunity to react to trauma. Chronic subdural hematoma is an elusive lesion, often occurring in alcoholic persons, with obscure symptoms requiring a high index of suspicion. When it is diagnosed early, definitive surgical treatment is indicated and usually brings gratifying results.

ZUSAMMENFASSUNG

Bewusstlose Kranke muessen sofort daraufhin beobachtet werden, ob eine Absperrung der Luftroehre vorliegt, die sofort behandelt werden muss und zwar, wenn eine laengere Ausdehnung der Bewusstlosigkeit erwartet werden kann, am besten mittels der Tracheotomie.

Mit gleicher Aufmerksamkeit muss der bewusstlose Kranke auf die Moeglichkeit einer Verletzung der Halswirbelsaeule mit oder ohne Beteiligung des Rueckenmarks untersucht werden; geeignete diagnostische Massnahmen und, im Falle einer Verletzung, sofortige Ruhigstellung mit Zugverband sind notwendig. Das extradurale Haematom stellt eine fruehzeitig eintretende und haeufig toedliche Erkrankung dar, die sorgfaeltigste Beobachtung leicht oder schwer verletzter Personen erfordert; nur die sofortige Diagnose und Einleitung chirurgischer Behandlung koenen zur Heilung beitragen, waehrend eine Verzoegerung der Behandlung unfehlbar zu toedlichem Ausgang fuehrt.

Kranke mit komplizierten Bruechen des Schaedeldaches beduerfen zwar ebenfalls rechtzeitiger Ueberwachung, sind jedoch nicht so dringende Kandidaten fuer einen chirurgischen Eingriff; durch fruehzeitig

eingeleitete allgemeine unterstuetzende Massnahmen und durch die Moeglichkeit, sich vom Trauma zu erholen, ist ihnen besser gedient. Das chronische subdurale Haematom ist eine leicht der Beobachtung entgehende Erkrankung, die haeufig bei Alkoholikern vorkommt. Die Symptome sind undurchsichtig und erfordern grosse Aufmerksamkeit zu ihrer Deutung. Wenn der Zustand rechtzeitig erkannt wird, ist ein chirurgischer Eingriff angezeigt und gewoehnlich von befriedigendem Erfolg.

SUMARIO

O paciente inconciente necessita atenção imediata para o reconhecimento e pronto tratamento da obstrução traqueal, de preferência por traqueotomia quando se espera que o periodo de inconsciência seja prolongado. O paciente inconsciente necessita também a avaliação imediata da possibilidade de trauma às estruturas de pescoço com ou sem comprometimento da medula espinhal, empregando-se de imediato a imobilização com tração na presença de tais lesões. Os hematomas extra durais produzem morte de maneira rápida, exigindo uma observação critíca e séria dos pacientes quer as lesões sejam leves ou sérias, de vez que o diagnóstico e tratamento cirúrgico precoces são necessários para a recuperação em contraste com o uniforme desenlace fatal nos casos em que o tratamento é deferido. Pacientes com fraturas compostas da abóbada craneana, ainda que necessitem tratamento de urgência, ão melhor atendidos com terapêutica médica e oportunidade de reagir ao trauma. O hematoma sub dural crônico é uma lesão ilusiva, ocorrendo frequentemente em alcoólatras, com sintomas obscuros e requer suspeita no diagnostico diferencial, uma vez que o tratamento cirúrgico é indicado e de modo geral produz resultados satisfatórios.

RIASSUNTO

I pazienti inconsci devono essere osservati con una cura particolare per poter riconoscere precocemente e trattare prontamente le ostruzioni tracheali, anche con la tracheotomia se lo stato di incoscienza si prolunga.

Devono inoltre essere valutate le probabilità che vi sia un trauma del collo, con o senza lesioni del midollo spinale, in modo da poter applicare subito la immobilizzazione e la trazione se necessaria.

L'ematoma extradurale è una lesione grave e rapidamente mortale, che impone un esame molto accurato in ogni trauma, grave o lieve, e un intervento chirurgico immediato se si vuol ottenere la guarigione; il ritardo nella diagnosi e nella cura è invariabilmente fatale.

Nei pazienti con fratture esposte della volta, invece, la necessità dell'intervento chirurgico non è così urgente, ed è meglio provvedere alle cure generali e alla risoluzione dello shock.

L'ematoma subdurale cronico è una lesione insidiosa, che si verifica spesso negli alcoolisti, che ha sintomi incerti e che richiede la cura chirurgica; questa, di solito, porta buoni risultati.

RÉSUMÉ

L'évanouissement nécessite un traitement rapide de l'obstruction trachéale, de préférence avec trachéotomie si l'on s'attend à une perte de connaissance prolongée. Il faut aussi immédiatement songer à une lésion de la nuque avec atteinte possible de la moëlle épinière; dans ce cas une immobilisation avec extension s'impose sans retard. L'hématome extra-duremérien est une lésion rapidement fatale; il doit être diagnostiqué et opéré d'urgence. Les fractures multiples de la voûte cranienne par contre, peuvent être traitées d'abord par des moyens conservateurs per-

mettant au patient de réagir au choc. L'hématome sous-duremérien chronique est une lésion à symptômes obscurs, souvent observée chez les alcooliques; il nécessite une intervention chirurgicale radicale qui donne souvent de bons résultats.

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Genitourinary Surgery

Revascularization of the Kidney

An Experimental Study and Clinical Evaluation

BENJAMIN S. ABESHOUSE, M.D., F.A.C.S., F.I.C.S., D.A.B.,*
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FOR the past three years the authors have participated in a series of experimental studies involving the use of an isolated loop of ileum as a substitute for a part of the bladder or the whole of it and as a substitute for one or two ureters. During the course of these experiments we were greatly impressed by the functional adaptability and viability of the transplanted ileal loop, which was attributed to its abundant vascularity. These features suggested to us the possibility of utilizing an isolated loop of ileum for revascularization of the normal or diseased kidney.

Historical Background. — A review of the literature revealed that revascularization of the kidney has been the subject of considerable experimental study in the past twenty-five years. Many and various organs and tissues have been employed in the attempt to establish new vascular connections with the normal or hypertensive (Goldblatt type) kidney of the experimental animal. Among the organs employed are the omentum,[1] the spleen[2] and the large and small intestines.[3] The following tissues have been employed: muscle,[4] pedunculated skin flap[5b] and splenic artery[6] (Figs. 1 to 8). In most of the experimental studies utilizing nephro-omentopexy, new or adventitious vascular connections did develop but were rather limited in size and degree and as a rule failed to produce any substantial permanent reduction in the hypertension. Better and more lasting results were obtained by fusing the spleen, the large or small intestine and a pedunculated skin flap.

Clinical Studies.—A few of these experimental methods have been adapted to the treatment of hypertension associated with different renal diseases with varying degrees of success. Abrami and his coworkers,[7] in 1939, treated hypertension in 2 cases of unilateral nephro-omentopexy, with no lasting reduction in the hypertension. DeTakats and Scupham,[8] in 1940, reported on 4 hypertensive patients treated by bilateral nephromyopexy and renal decapsulation (1 case), unilateral nephromyopexy (2 cases) and unilateral nephro-omentopexy (1 case); in no case was there any definite improvement in the hypertension. In another case, in which hypertension was associated with bilateral congenital renal hypoplasia treated by nephro-omentopexy on one side, nephromyopexy on the other side and bilateral trans-diaphragmatic splanchnic resection, they observed that six months later the patient was free of headaches

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and dizziness and had gained strength and weight, but no mention was made of any improvement in the hypertension.

Ritter,[9] in 1941, employed nephro-omentopexy in a case of hypertension in a 32-year old woman and obtained reduction of the hypertension to normal limits for at least one year after the operation. Bruger and Carter,[10] in 1941, reported 2 cases of chronic nephritis treated by right nephro-omentopexy, 4 cases of essential hypertension treated by nephro-omentopexy, 2 cases of hypertension treated by right nephro-omentopexy and left nephromyopexy and 1 case of hypertension associated with right nephrolithiasis and chronic pyelonephritis treated by right nephrectomy and left nephromyopexy. The results were rather disappointing, for in the cases of unilateral nephro-omentopexy and in the bilateral operative cases in which different procedures were utilized there was an appreciable reduction in hypertension, persisting for two to three months after the operation, but a return to the preoperative level took place within six months. Symptomatic relief of headaches, vertigo, etc. was noted after nephro-omentopexy, however, in 6 of the 9 patients followed for two to eleven months.

Weeks and his associates,[11] in 1946, treated 3 patients with essential hypertension by nephrosplenopexy, but in no case was the hypertension reduced for more than three weeks, although these patients were observed for one year, two years and ten months, and four years respectively. Katz and his co-workers,[3] in 1956, utilized a Roux type of nephrojejunopexy or nephroileopexy in 6 clinical cases but failed to state the results obtained.

Materials and Methods.—After the present series of experiments was started, the authors reviewed the literature on revascularization of the kidney and found the report of Katz and his associates[3] who in 1956 performed 46 fusions between the deserolized intestine and the kidney in 27 dogs: viz., nephrocolonopexy was performed 10 times, the Roux Y type of jejunal or ileal loop (nephrojejunopexy or nephroileopexy) 29 times and nephroduodenopexy 7 times. They observed that the

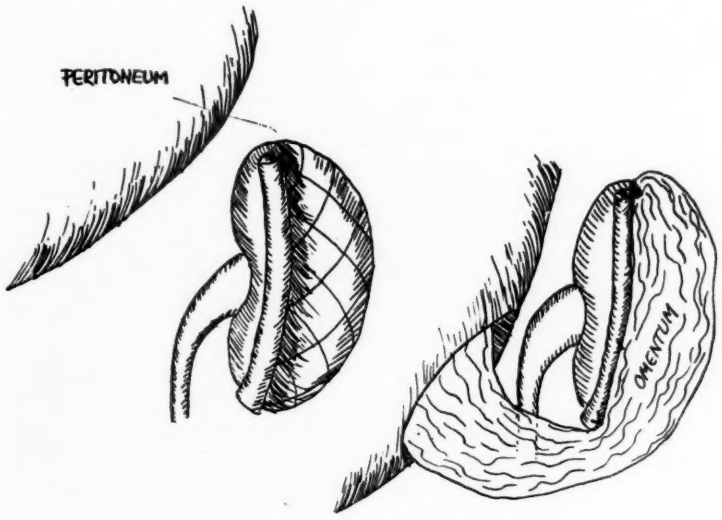

Fig. 1.—Nephro-omentopexy. Diagram illustrates suturing of omentum to partially decapsulated and scarified kidney.

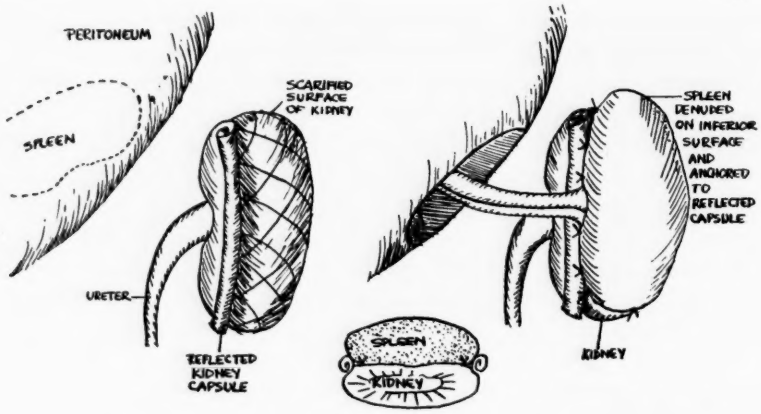

Fig. 2.—Nephrosplenopexy. Diagram illustrates suturing of scarified surface of spleen to partially decapsulated and scarified kidney.

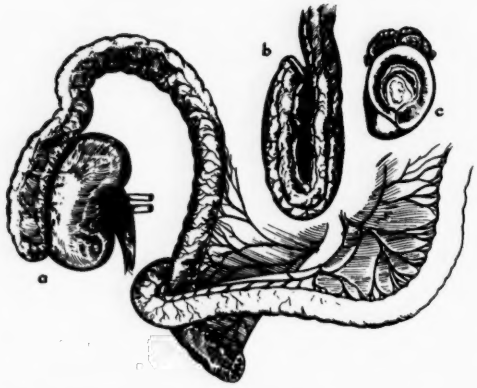

Fig. 3.—Nephroileopexy (Katz, Hannon, Alden and Baronofsky, Surgery 39:623, 1946). Diagram illustrates use of Roux Y portion of ileum to cover decapsulated kidney.

size and number of the vascular connections were more extensive after fusion with the small intestines than when the large bowel was used.

In the present series of experiments, 8 mongrel dogs weighing between 20 and 50 pounds (9.1 and 22.7 Kg.) were prepared with sulfasuxidine (5 Gm. daily) and by preoperative fasting for two days. Intravenous nembutal was administered. Through a midline incision a segment of ileum measuring 12 to 14 cm. and containing an adequate vascular supply was isolated from the terminal portion of the ileum. The continuity of the ileum was reestablished by an end-to-end anastomosis performed in the conventional manner, a continuous No. 2 black silk suture being used for the serosal layer and continuous No. 00 plain catgut for the inner mucosal layers. The isolated loop of ileum was thoroughly irrigated with sterile physiologic solution of sodium chloride and was opened near the mesenteric border. The mucosa of the opened loop was carefully scraped off with a knife.

The left kidney was delivered into the wound. The renal capsule was incised on its outer border and retracted on each side for a distance of 3 to 4 cm. The opened ileal loop was placed around the entire kidney with the denuded mucosal surface in direct contact with the renal cortical surface. The edges of the ileal segment were anchored to the edges of the rolled-up capsule by interrupted No. 2 black silk sutures (Fig. 9).

Food was withheld for twenty-four hours after the operation, and 0.3 Gm. of streptomycin and 300,000 units of procaine penicillin were injected intramuscularly daily for two days after the operation. A

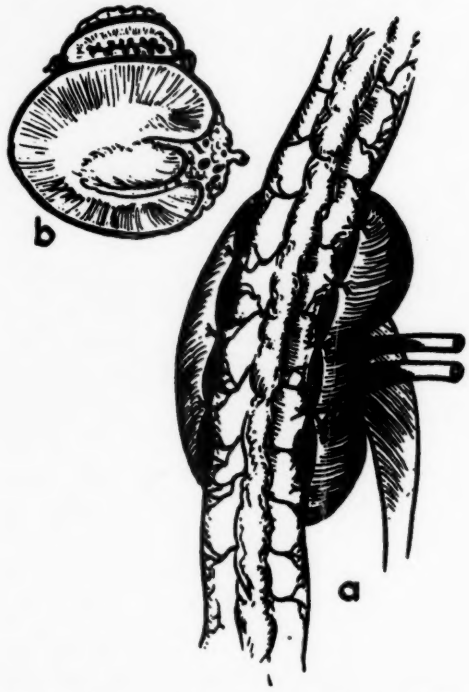

Fig. 4.—Nephrocolonopexy (Katz, Hannon, Alden and Baronofsky). Diagram illustrates fusion of large bowel to decapsulated kidney surface.

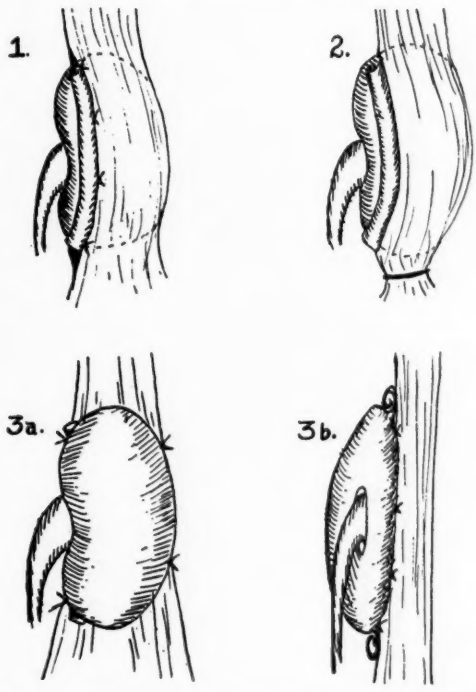

Fig. 5. — Nephromyopexy. Diagram illustrates (1) insertion of decapsulated kidney into divided psoas muscle; (2) anastomosis of free muscle flap from psoas or quadratus lumborum muscles to decapsulated kidney; (3) anastomosis of decapsulated posterior surface of kidney to intact psoas muscle—anterior-posterior view, and (4) same as 3, lateral view.

daily intravenous injection of 10 per cent dextrose was administered for three days after the operation. Normal diet was resumed on the third postoperative day.

The formation of new vascular communications between the denuded mucosal surface of the isolated ileal loop and the kidney was demonstrated by injection

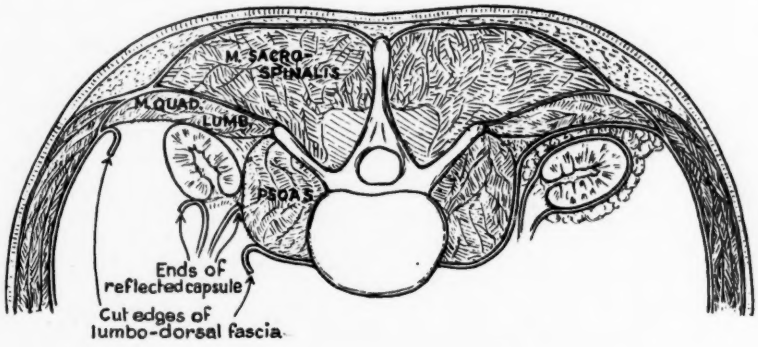

Fig. 6.—Nephromyopexy (Bruger and Carter, Ann. Surg. 113:381, 1941). Diagram illustrates anatomic relations of nephromyopexy in man.

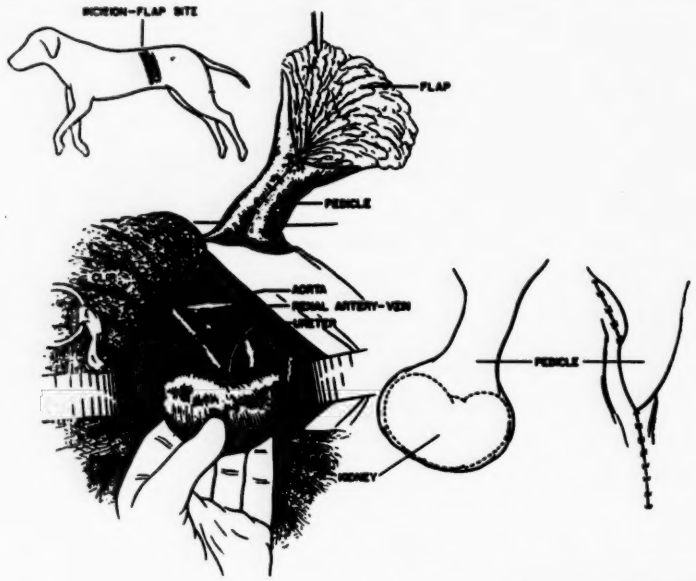

Fig. 7. — Nephrocutaneopexy (Stone, Wade, Hinton, Lord and Neuman, Arch. Surg. 72:92, 1956). Diagram illustrates experimental anastomosis of pedunculated skin flap to kidney.

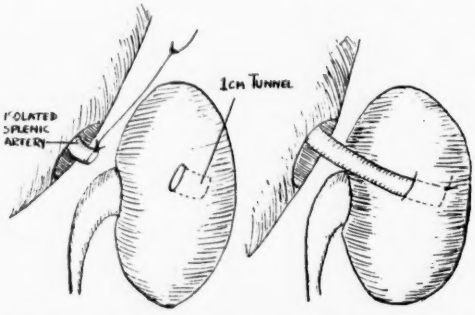

Fig. 8.—Diagram of revascularization of kidney by implantation of splenic artery into renal cortex (Davis and Morse, Arch. Surg. 73:13, 1957).

studies in autopsy and surgical specimens after a minimum of seventeen days. The nutrient artery of the mesentery of the isolated ileal loop was injected with dilute india ink or with a thin suspension of micropaque barium sulfate, and after thirty minutes the dogs were killed. When the various media were injected into the nutrient artery of the ileal loop at varying intervals two to three weeks after the original operation, the renal hilar vessels were observed for the appearance of the injection. The india ink appeared in both the renal artery and the renal vein eight minutes after the injections, which were made two and one-half to three weeks after the operation. The barium sulfate usually appeared in the renal artery and not in the vein.

The india ink particles could be readily demonstrated in the glomeruli and in the small arterioles in the region of the proximal tubules (Fig. 10). Roentgenograms were taken after the injection of barium sulfate and demonstrated new vascular connections between the ileal loop and the renal cortex (Fig. 11).

In another series of 4 experiments, the isolated ileal loop was not opened but a portion of the serosa was denuded over an area 3 cm, wide and the entire length of the ileal segment. This area was attached to the decapsulated zone of renal cortex by interrupted sutures of No. 2 black silk between the rolled-up renal capsule and the serosal surface of the kidney. Similar

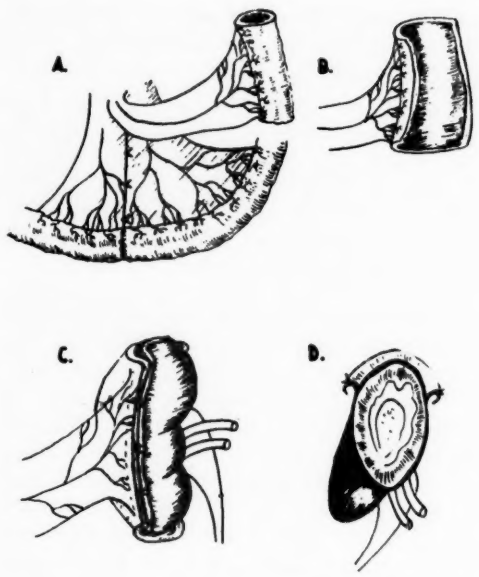

Fig. 9.—Nephroileopexy utilizing isolated loop of ileum (Abeshouse and Goldstein). Diagram illustrating (*A*) preparation of isolated loop of ileum from the terminal portion of the ileum; (*B*) opening the isolated loop of ileum and denudation of mucosal surface; (*C*) and (*D*), anastomosis of denuded mucosal surface of isolated loop to partially decapsulated and scarified surface of kidney.

injection studies were made, and the size and number of the new vascular connections appeared to be more numerous and extensive than in the previous experiments utilizing the denuded mucosal surface of the ileal loop. When india ink and barium sulfate were injected they appeared in the renal artery at a slightly faster rate, i.e., after five minutes and seven minutes respectively.

Results.—Up to the time of writing, 16 dogs have been subjected to nephroileopexy. The operation was performed on the right side in only 1 dog. All animals tolerated the operation well except the first dog, which died on the second postoperative day of general peritonitis due to a faulty end-to-end anastomosis of the ileum, and the ninth dog, which died of intestinal obstruction on the third postoperative day. In the remaining dogs there was a slight loss of weight during the first postoperative week. Repeated determinations of the plasma urea nitrogen content after the operation revealed values within normal limits (9 to 17 mg. per hundred cubic centimeters). Urinalysis revealed no albuminuria and no significant microscopic hematuria or pyuria. No gross hematuria was noted in any dog.

Further studies are contemplated in order to determine the functional capacity of the kidney after nephroileopexy utilizing both the denuded mucosal surface of the opened loop and the deserosalized surface of the intact loop, as follows:

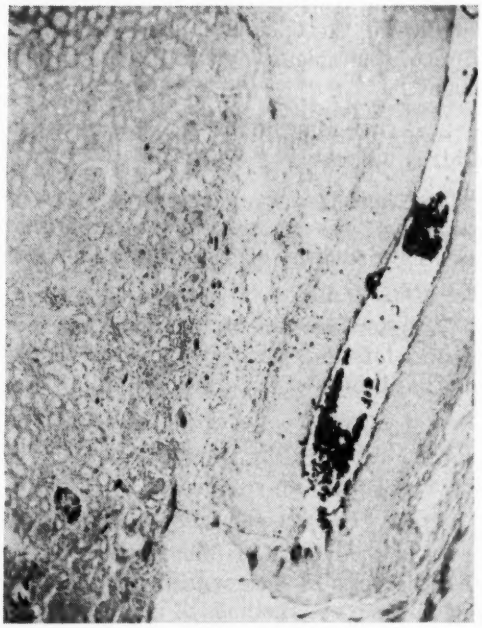

Fig. 10.—Photomicrograph taken after injection of india ink solution into nutrient artery in mesentery of isolated loop of ileum (eighteen days after nephroileopexy). Note india ink particles in new vessels on cortex, in glomeruli and small vessels near glomeruli, and in proximal convoluted tubules.

Fig. 11.—Roentgenograph taken after injection of microfine barium sulfate into nutrient artery of mesentery of isolated loop (twenty-two days after nephroileopexy). Note barium particles in cortical area of kidney.

1. Employing other methods of revascularization, i.e., fusion of the deserosalized surface of the open ileal loop and insertion of the splenic artery into the renal cortex.

2. After removal of the contralateral kidney untreated by operation.

3. After ligation of the renal vascular pedicle of the operatively treated kidney in the presence of the intact opposite kidney.

4. After ligation of the renal vascular pedicle of the operatively treated kidney in the absence of the contralateral kidney.

5. After production of unilateral and bilateral nephritis by roentgen rays or by chemical methods.

Clinical Application.—The development of a new adventitious blood supply in the cortical area of the surgically treated kidney by the two methods of nephroileopexy here described suggests the possibility that these procedures may be utilized in the treatment of some of the various renal diseases that are characterized by severe damage to the intrarenal blood supply of the kidney and are associated with impaired renal function and hypertension. It is possible that the development of a new adventitious blood supply between the point of renal vascular damage and the affected nephron may have a beneficial effect upon renal function and hypertension in such renal diseases as arteriosclerosis, chronic nephritis, chronic pyelonephritis, congenital hypoplasia, polycystic disease and nephrosis.

The degree of benefit to be derived from nephroileopexy will be influenced by the extent and point of entry of the new blood supply into the damaged vascular tree of the affected kidney. Since the cortical area is the site of greatest damage in most of the aforementioned renal diseases and is also the site of the new vascular connections that follow nephroileopexy, one would expect increased renal function to result from the additional blood flow and regeneration of the damaged glomeruli and tubules in the newly vascularized area. The new experimental studies contemplated (as previously outlined) will undoubtedly throw some definite light on the adequacy of the new vascular connections in sustaining renal function and its influence upon the regeneration of damaged glomeruli and tubules.

CONCLUSIONS

1. Two new methods of nephroileopexy are described, namely, fusion between the decapsulated surface of the kidney and the denuded mucosal surface of the isolated ileal loop of the partially deserosalized surface of the intact isolated ileal loop.

2. Nephroileopexy results in the formation of new vascular connections between the vessels of the intestinal segment and the normal dog kidney.

3. The size and extent of the new vascular connection appear to be more extensive after fusion of the deserosalized

surface than after fusion of the denuded mucosal surface of an isolated loop.

4. India ink injected into the nutrient artery of the isolated ileal loop reaches the glomeruli and small arterioles near the proximal convoluted tubes and appears in the main renal artery and vein within five to eight minutes.

5. Roentgenograms taken after the injection of a suspension of micropaque barium sulfate into the nutrient artery of the isolated ileal loop demonstrates abundant new vascular communications between the ileal loop and the kidney.

6. Further observations of the actual or potential functional capacity of the new vascular connections in the kidney will be determined by a series of further studies as outlined.

CONCLUSIONS

1. Deux méthodes neuvelles de néphro-iléopexie sont décrites, à savoir: entre la surface décapsulée du rein et la surface muqueuse dénudée de l'anse iléale isolée dont on a partiellement enlevé la séreuse.

2. La néphro-iléopexie entraîne la formation d'une nouvelle communication vasculaire entre les vaisseaux du segment intestinal et le rein normal du chien.

3. La dimension et l'étendue de la nouvelle communication vasculaire est plus importante après "fusion" de la surface privée de séreuse qu'après "fusion" de la surface muqueuse dénudée d'une anse isolée.

4. L'encre de Chine injectée dans l'artère nourricière de l'anse iléale isolée, atteint les glomérules et les petites artérioles proches des tubes contournés proximaux et apparaît dans l'artère rénale principale et dans la veine rénale principale en 5 à 8 minutes.

5. Les roentgenogrammes pris après l'injection de sulfate de baryum dans l'artère nourricière de l'anse iléale isolée, montrent la présence de nombreuses communications vasculaires nouvelles entre l'anse iléale et le rein.

6. L'auteur poursuit ses recherches sur la capacité fonctionnelle réelle ou potentielle des nouvelles communications vasculaires du rein.

CONCLUSIONI

1. Vengono descritti due metodi di nefroileopessia, uno dei quali consistente nell'affrontamento di una zona decapsulata di rene a una zona di parete intestinale denudata fino alla mucosa, l'altro a una zona di parete intestinale privata semplicemente della sierosa; in entrambi i casi si utilizzano anse ileali isolate.

2. La nefroileopessia determina la formazione di aderenze vascolari fra l'intestino e il rene (nel cane).

3. Tali aderenze appaiono più vaste dopo fusione con l'ansa speritonealizzata piuttosto che con quella denudata fino alla mucosa.

4. Iniettando inchiostro di China nell' arteria afferente dell'ansa intestinale si vede che il colore raggiunge i glomeruli renali e le arteriole in vicinanza dei tubuli contorti; dopo circa 5-8 minuti raggiunge le arterie e le vene renali maggiori.

5. Anche l'iniezione nelle arterie intestinali di una sospensione di bario consente di dimostrare radiologicamente la presenza di una ricca rete vascolare neoformata fra l'ansa ileale e il rene.

6. Ulteriori studi potranno dimostrare l'efficienza funzionale di queste anastomosi.

SCHLUSSFOLGERUNGEN

1. Es werden zwei neue Methoden zur Anheftung des Ileums an die Niere beschrieben. Die Fixation erfolgt zwischen der entkapselten Nierenoberfläche einer-

seits und der entblössten Schleimhautoberfläche einer isolierten Ileumschlinge oder der teilweise von der Serosa befreiten Oberfläche einer intakten isolierten Ileumschlinge andererseits.

2. Die Verbindung der Niere mit dem Ileum führt zur Bildung neuer Gefässverbindungen zwischen dem Darmsegment und der Niere des normalen Hundes.

3. Die Grösse und Ausdehnung der neuen Gefässverbindungen scheinen nach Verbindung der von der Serosa befreiten Oberfläche mit der Niere umfangreicher zu sein als nach der Fusion der entblössten Schleimhautoberfläche einer isolierten Schlinge mit der Niere.

4. In die ernährende Arterie der isolierten Ileumschlinge eingespritzte chinesische Tusche erreicht die Glomeruli und die kleinen Arteriolen in der Nähe der proximalen gewundenen Nierenkanälchen und erscheint in den Stämmen der Arterie und Vene der Niere innerhalb von 8 Minuten.

5. Nach Einspritzung feiner Suspensionen von Bariumsulfat in die ernährende Arterie der isolierten Ileumschlinge angefertigte Röntgenaufnahmen lassen reichliche neue Gefässverbindungen zwischen der Ileumschlinge und der Niere erkennen.

6. Weitere Beobachtungen über die tatsächliche oder potentielle Funktionstüchtigkeit der neuen Gefässverbindungen in der Niere werden von einer Reihe fernerer Untersuchungen, die kurz skizziert werden, erwartet.

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Prevention and Treatment of Postoperative Thromboembolic Disease in Genitourinary Surgery

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FOR more than a century thromboembolic disease and blood coagulation have been studied by scientists and clinicians the world over. The First International Congress on Thrombosis and Embolism, held in Basal in 1954, represented the first collective interchange of thought aimed at combating this dreaded disease. Unfortunately phlebothrombosis, thrombophlebitis and pulmonary embolism frequently occur after surgical intervention and parturition, although they are quite common in medical patients.

Circulatory stagnation is the primary cause, but increased coagulability of the blood is also an etiologic factor. It is therefore essential to understand, in addition to anticoagulant therapy, the physical measures that can be taken to assure normal circulation. Predisposing factors are aging, carcinoma, degenerative cardiovascular disease, foci of infection and varicosities of the pelvis or the lower extremities. An added factor is undue trauma at operation and injury to the veins of the leg while the patient is in bed.

Seldom has there been such a difference of opinion as to the treatment of thromboembolic disease, but I have noticed that its postoperative incidence is least in those clinics in which a definite preventive plan is carried out. I wish to emphasize the prophylactic measures I have used successfully to prevent its occurrence after genitourinary operations. I have found that routine postoperative elevation of the foot of the bed is a simple measure that assures increased venous return flow and minimizes the complication of thromboembolic disease.

The incidence of pulmonary emboli averages 0.1 to 0.2 per cent after all operations. It is the cause of approximately 2 per cent of all deaths and is observed in 1 to 12 per cent of routine autopsies. Perusal of the literature reveals the expected incidence of thromboembolic disease complicating surgical procedures as follows:

Ochsner: Pulmonary embolism, 0.7 per cent mortality rate in 186,279 patients; thromboembolic disease, 1.529 per cent mortality rate in 627,868 admissions. De Takats and Jesser: Pulmonary embolism, 0.1 to 0.2 per cent. Carlotti, and his associates: Pulmonary embolism, 0.24 per cent. Nygaard: Fatal emboli, 0.6 per cent of 175,100 patients. Zimmerman and his associates: Fatal emboli in 0.5 per cent. At St. Mary's Hospital during the past five years, 50 cases of thromboembolic disease (0.33 per cent) complicated 14,877 major operations.

Of interest is the following incidence observed at autopsy. Belt: Pulmonary embolus in 9.8 per cent of 567 routine autop-

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sies. Hunter: Pulmonary embolus in 3.13 per cent of 200 autopsies; phlebothrombosis in 52.7 per cent of 351 unselected autopsies. McCartney: Fatal pulmonary emboli in 5.3 per cent of 25,571 autopsies. Roessle: Thrombi in calves of legs, 27.1 per cent of 324 autopsies. Ceelen stressed the frequency of pulmonary embolism in the presence of venous thrombosis and pointed out that careful dissection of the pulmonary arteries of these patients would probably reveal emboli in approximately 75 per cent.

Clinical Pathologic Picture. — A thorough knowledge of the clinical pathologic aspects of postoperative thromboembolism is essential in order to institute safe and effective preventive measures. The principal etiologic considerations are predisposing lesions, venous stagnation, increased postoperative coagulability of the blood and pathologic changes in the walls of the veins due to trauma, infection or degenerative disease.

Predisposing factors include arteriosclerosis, venosclerosis, cardiovascular disease, anemia, cachexia, dehydration, sepsis, and, electrolyte imbalance. The incidence of thromboembolism is highest in patients over 40 years of age, particularly those with cardiac disease, and it is important to have an internist evaluate and stabilize cardiac action prior to operation. Anemia should be controlled (by medication or transfusion), dehydration and sepsis relieved and electrolyte balance restored. When the patient has varicosities or thrombophlebitis, the advice of a specialist in vascular disease should be obtained. Large emboli are least likely to develop in patients who have had previous attacks of thrombophlebitis.

Trauma should be avoided at the site of operation, as should trauma to the leg veins. Clean, sharp dissection should be carried out, with avoidance of unnecessary trauma to the tissues by rough handling or severe pressure upon manipulating retractors. Veins should be clamped and ligated but not bruised. As thromboembolic disease is more apt to complicate operations on the prostate or the bladder, one should exert extra caution in dealing with these organs. In operations on the bladder or the prostate, when the patient is in the lithotomy position, the popliteal veins often are compressed and traumatized. Leg supports should be well padded, therefore, and the patient's legs flexed and extended from time to time to prevent stasis. One should avoid performing an unusually long operation with a patient in the lithotomy position: transurethral resection of a large hypertrophied prostate, for example, which should preferably be removed at open operation with the patient in the supine position. Frykholm pointed out that considerable damage to the calves occurs while a patient lies in bed, the resulting pressure on the collapsed veins preventing the epithelium from obtaining proper nourishment from the circulating blood stream. Periodic raising of the legs and turning of the patient from side to side will eliminate this problem.

The coagulability of blood is increased after an operation, owing to changes that have taken place in its constituents. The viscosity and specific gravity are increased because of a rise in fibrinogen and serum globulin. The prothrombin level is raised and that of antiprothrombin decreased. Leukocytosis takes place, and there is an increase in the number of platelets liberating thrombokinase. All of these factors alter the complex clotting mechanism that hastens coagulability of the blood, particularly when it is stagnant and the veins of the lower extremities are weakened by disease. Furthermore, inactivity causes atrophy of the calf muscles, resulting in the degenerative changes that accompany liberation of a thrombogenic substance, leading to terminal thrombosis (Voegt).

All these mechanical and chemical factors affect the clotting mechanism and favor the formation of phlebothrombosis and phlebitis in varicose veins. In cases of phlebothrombosis the thrombus is readily detached and passes into the femoral vein with resulting embolus as there is no inflammatory reaction to fix the clot.

Venous Stasis.—Nearly a century ago, Virchow coined the word thrombosis (coagulation of blood at a fixed point) and called attention to the cause of retarded circulation. Since then the majority of investigators agree that venous stasis is by far the most common cause of phlebothrombosis, thrombophlebitis and resulting pulmonary embolism. The principal factors producing changes in the hydrodynamics of venous circulation are muscular inactivity, cardiac failure, shock and a constantly recumbent position of the body. Routine autopsies reveal that 25 to 50 per cent of patients who are bedridden for long periods have thrombi of the deep veins of the pelvis or the legs.

Aschoff demonstrated that clots arise first in the peripheral veins that propagate proximally to larger veins. Frimann-Dahl accurately demonstrated the delayed emptying time of the saphenous veins in patients bedridden for protracted periods. Fluoroscopically he observed that contrast medium injected into the saphenous vein disappeared within five to thirty seconds in normal persons, while it took one to two minutes in bedridden patients. When venous stagnation occurs, there is a tendency for thrombi to be initiated at the apices of the valve pockets (Paterson and McLachlin).

In persons over 40 years of age there is a tendency to beading or sacculation of the deep veins of the lower extremities, which decreases the linear velocity of blood flow, thus leading to venous stasis and the formation of emboli (Stanton). Furthermore, the resistance of cohesive masses of

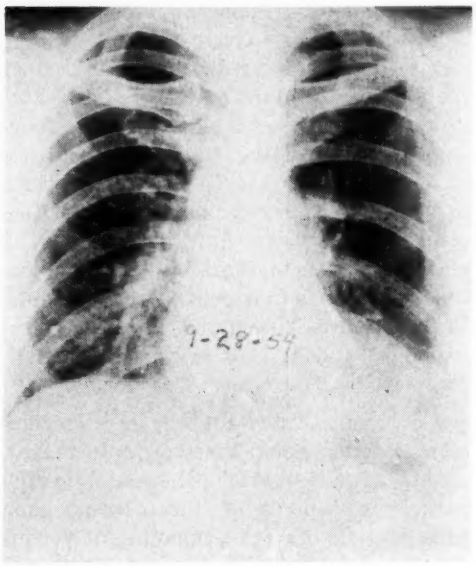

Fig. 1.—Roentgenogram showing pulmonary embolus lower lobule of left lung, which occurred four weeks after transurethral resection of prostate. Note characteristic diffuse, noncircumscribed and nonspherical density.

sludged blood, consisting of agglutinated red cells, in the passage of blood through the bottleneck of the circulatory system, reduces the rate of blood flow through all the open vessels of the body (Knisley).

There is a high percentage of thromboembolism in elderly persons, particularly in the presence of cardiovascular disease. I wish to emphasize the importance of instituting preoperative care so that the heart is well compensated at the time of operation, and the use of such surgical technic as will prevent decompensation. Better circulation can be maintained by assuring good cardiac action. Shock should be immediately relieved. Tight abdominal binders should not be applied postoperatively, as pressure on the abdomen may cause venous stagnation. The patient should be instructed in proper deep breathing so as to create negative pressure in the chest, which will favor venous return flow.

Prophylactic Measures. — Thromboembolic disease may occur as early as the second postoperative day or, rarely, after the fourteenth. In the majority of my cases it occurred between the first and the fourteenth postoperative day. The incidence in 50 cases after 14,877 major operations in the Surgical Service at St. Mary's Hospital was as follows: first to eighth day, 22 patients; ninth to fourteenth day, 20 patients; after the fourteenth day, 8 patients. In 2 instances it occurred within the first two days and in 1 as late as the fiftieth day.

I have instituted and heartily recommend a definite plan based on careful evaluation of the physiologic, anatomic and pathologic aspects of thromboembolism. This consists of: (1) promotion of venous circulation by placing the patient in the Trendelenburg position, using a local compression bandage on both lower extremities, passive exercise, early ambulation and deep breathing; (2) anticoagulent therapy; (3) antibiotic therapy, and (4) ligation of the femoral vein.

I emphasize the importance of controlling predisposing factors by preliminary treatment of the poorly functioning heart, correction of shock, anemia, cachexia, dehydration and electrolyte imbalance, performance of atraumatic operations and avoidance of undue pressure on the legs, since every patient over 15 years of age is potentially menaced by thrombosis. When there is any suspicion that phlebothrombosis of the deep leg veins (which is usually quiet) is present, daily palpation for tenderness in the vein or calf and the use of Homan's sign are recommended for early detection. Bauer stated that elusive thromboembolic disease can be unmasked in the early stage by immediate venographic studies.

Promotion of Venous Circulation. — Many investigators maintain that impaired venous circulation following operation is the most important cause of throm-

TABLE 1.—*Fatal Embolism*

Operation	*Days After Operation*	*Prophylactic Measures*	*Autopsy*
Prostatectomy: Retropubic (2)	14, 9	None	No
Suprapubic (1)	2	None	Yes
Transurethral resection (1)	8	Up in 5 days	No
Nephropexy, resection aberrant vessel (1)	14	None	Yes
Cystoscopy and biopsy (1)	4	None	Yes
Gastric resection (1)	6	None	No
Transverse colostomy (1)	9	None	No
Appendectomy (repair evisceration 8 days later (1)	18	None	No
Ovarian cystectomy (1)	5	None	No
Cholecystectomy (2)	9	None	No
Cholecystectomy (2)	5	Early ambulation	No
Herniotomy (2)	10	None	Yes
Herniotomy	10	Yes	No
Bilateral ligation of femoral vein (1)	7	Yes	Yes
Section 5th cranial nerve; *Tic Douloureux* (1)	9	None	No
Fracture of ribs following trauma (1)	10	None	Yes

boembolism. In the lower half of the body venous circulation can be favorably influenced by physical means, such as elevation of the foot of the bed, ambulation or a pressure bandage.

Elevation of Foot of Bed (Trendelenburg Position).—If the foundation for embolic disease is established within the first twenty-four postoperative hours it is essential that adequate venous circulation be restored promptly. The stress of operation, the effect of anesthesia and the danger of secondary hemorrhage after many genitourinary procedures, i.e., prostatectomy, cystectomy, nephrectomy or partial resection of a kidney, makes it impossible to get the patient out of bed postoperatively for three to five days after the operation or even longer. Elevating the foot of the bed 12 inches (30.6 cm.) immediately after the operation is most effective in controlling venous stagnation. This measure is simple, requires no special technic and is inexpensive and harmless. I have employed it with excellent results after kidney operations during the past forty years and after all other urologic operations durng the past five years.

Exercise and Early Ambulation. — Venous stasis due to muscular inactivity can be overcome by exercise instituted immediately after the operation. The patient is instructed to contract the leg and thigh muscles against resistance. "Bicycle pedaling" for five minute intervals, frequently, without fatiguing the patient, is excellent. Flexing the knees and extending the feet four times every hour is also recommended.

Dangling of the legs over the edge of the bed is no substitute for ambulation. It does more harm than good and should be condemned. Sitting is equally bad, and patients should be instructed to sit up only for ten-minute periods.

Ambulation should be instituted after recovery from anesthesia, as periodic walking is effective in promoting circulation and lessens the likelihood that sludged blood will obstruct the arterioles and venules. Activity of the voluntary muscles stimulates normal function of the involuntary muscles, thus maintaining a proper blood flow through the peripheral capillary units of the lower extremities. Walking promotes the tone of the gastrointestinal tract and tends to stimulate deeper breathing, improving the vital capacity of the lungs and thus creating more oxygen and hastening the return blood flow.

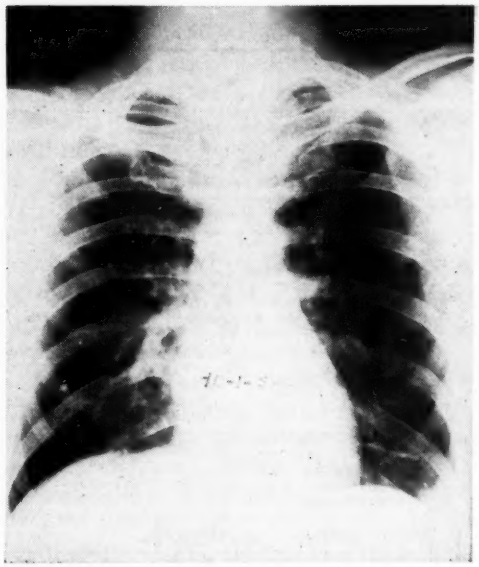

Fig. 2.—Roentgenogram taken three days later. Note improvement following proper treatment.

Leithauser reported no cases of fatal pulmonary embolism and only 2 of thrombophlebitis in a series of 3,371 consecutive surgical cases in which leg exercise and ambulation were instituted immediately after recovery from anesthesia

Local Compression of Legs. — Elastic bandage compression of both legs after the operation accelerates the linear velocity of blood flow through the veins, which is inversely proportional to that of the re-

TABLE 2.—*Nonfatal Embolism*

Operation	*Days After Operation*	*Prophylactic Measures*	*Detected Venous Thrombosis*
Plastic repair hydronephrosis	20	Yes	—
Prostatectomy: Transurethral	28	Yes	—
Suprapubic	13	No	—
Dilation urethral stricture (anesthesia)	5	No	—
Gastric resection	12	No	Saphenous veins Abdomen
Gastric resection	6	Yes	—
Abdominal perineal resection	9	No	—
Childbirth	5	No	—
Childbirth	9	No	—
Childbirth (episiotomy)	9	No	Legs
Hysterectomy	10	Yes	—
Hysterectomy	2	Yes	—
Stoffel operation/quadriplegia	3	No	—
Bilateral saphenous vein ligation	10	Yes	—
Ligation and stripping/saphenofemoral	1	No	—
Repair fractured femur	1	No	—
Repair fractured femur	31	Yes	—
Repair fractured femur	12	No	—
Repair fracture rami pelvis	4	No	—
Menisectomy	7	No	—
Aspiration of hematoma/knee	50	No	—
Repair of ligament/knee	16	No	—
Removal of bunion	11	No	—
Trauma to left leg	7	No	Left leg
Trauma to ankle	11	Yes	Yes

duced cross sectional area. To be effective, the bandage must exert uniform pressure on the two legs and lend itself to simple application by hospital personnel. The T.E.D. (Bauer & Black) elastic stocking, reinforced with nylon, is convenient, practical and effective. A compression bandage may be contraindicated, however, when there is severe arteriosclerosis or ischemic vascular disease; in these circumstances it is best to rely on elevation of the foot of the bed.

Anticoagulant Therapy. — The efficacy of anticoagulants in the treatment of thromboembolic disease has prompted many surgeons to use it prophylactically after operation. Dicumarol, heparin, alphatocopherol, venostasin and other such preparations have been used. Variations in coagulation depend in part on the relative proportion of antithrombin and thrombin, and clots are likely to form in patients with low antithrombin and normal prothrombin levels. It has been sug-

gested that the circulating antithrombin may be alphatocopherol phosphate, which is normally present in alpha globulin and gamma globulin factors of the blood.

As a postoperative prophylactic measure against phlebothrombosis, both Ochsner and Wilson used 200 mg. of alphatocopherol phosphate and 10 ml. of calcium glutinate, intravenously, every forty-eight hours. Wilson noted that it had a beneficial effect on the degree of thrombosis in 100 patients, but not on the incidence. Slivon employed venostasin (extract of wild chestnuts) on 308 gynecologic patients. In the control group, thrombosis developed in 10 and pulmonary embolus in 3; in the treated group thrombosis developed in 2, but there was no incidence of pulmonary emboli. Thies employed anticoagulants on 6,000 operative patients and noted general bleeding in 1 per cent, and bleeding after gastric resection in 7 per cent (1 patient died of massive cerebral hemorrhage).

While prophylactic anticoagulant therapy is generally successful, it is impractical, as it requires expensive laboratory tests and there is great danger of postoperative bleeding. I reserve its use for thromboembolic disease only after the disease has manifested itself.

Ligation of Femoral Veins.—Ligation of the superficial femoral vein well above the site of the thrombus, to prevent dislodged segments from passing into the lung, seems logical. It has been used both pro-

TABLE 3.—*Thromboembolic Disease of Lower Extremities*

Operation	*Days After Operation*	*Prophylactic Measures*	*Treatment*
Plastic repair of right kidney	30	Yes	Heparin/antibiotic
Retropubic prostatectomy	12	No	Heparin/Dicumarol
Childbirth: episiotomy	2	No	Trendelenburg/heat/bandage
Childbirth: episiotomy	2	No	—
Childbirth	1	No	Trendelenburg/antibiotic
Panhysterectomy	6	No	Elastic stocking/ambulation
Panhysterectomy	10	No	—
Cholecystectomy	7	Yes	Trendelenburg/ambulation/ antibiotic
Colporrhaphy	3	No	Leg exercise
Cystocele and rectocele repair	3	No	Bed rest/heat/Dicumarol

TABLE 4.—*Value of Trendelenburg Position in Postoperative Prevention of Thromboembolic Disease*

Operation	*No. of Patients*	*Trendelenburg Position*	*Thromboembolic Disease*		*Mortality Rate*	
			Patients	*%*	*No.*	*%*
Genitourinary	442	Used	3	0.68	0	0
Genitourinary	1,220	Not used	9	0.74	6	0.49
Prostate	184	Used	2	1.08	0	0
Prostate	408	Not used	6	1.47	4	0.98

phylactically and therapeutically. Allen carried out postoperative systematic bilateral femoral ligation in 458 patients undergoing the same operation; fatal pulmonary embolus developed in 26 patients in the control group, whereas in only 1 of the patients treated by ligation did an embolus develop. Most surgeons, however, resort to vein ligation only after thromboembolic disease is obvious (Bauer, Carlotti, Homans). The efficacy of ligation of the vein is questioned because of the difficulty in locating the exact site of the clot, which may be situated in the venous system well above the ileofemoral juncture. In such an instance it would be necessary to ligate the vena cava just below the heart to prevent propagation of clots. Webb employs venous ligation to prevent postphlebitic syndrome, i.e., erysipelas, ulcer or edema of the legs.

An interesting case was that of a patient subjected to bilateral ligation of the femoral vein for right phlebothrombosis accompanied with swelling and tenderness. Seven days later she died of massive pulmonary embolism, and autopsy revealed that the pulmonary embolus originated from a thrombus in the right femoral vein above the inguinal ligament. This case exemplifies the reason that vein ligation is not popular at present.

Kerr stated that femoral ligation is never justifiable, even after thrombosis is obvious. McLachlin and Paterson expressed the opinion that the operation is basically unsound. Olwin condemned it as "unrational." Salomon observed that it augments and extends postphlebitic edema of the legs. In my own opinion it should rarely, if ever, be employed.

Analysis of Cases.—At St. Mary's Hospital during the past five years (1952-1957) 50 cases of thromboembolic disease complicated 14,877 major operations (including 2 accidents): 18 (0.12 per cent) fatal, 22 (0.14 per cent) nonfatal pulmonary embolism; 10 (0.06 per cent) thrombosis of the veins of the lower extremities. Of these 50 cases, 10 (0.2 per cent) thromboembolic disease followed genitourinary operations; 17 (0.34 per cent), abdominal operations; 9 (0.18 per cent), intervention on bones and joints; 6 (0.12 per cent), childbirth; 3 (0.06 per cent), vein ligation; 2 (0.14 per cent), herniotomy; 1 (0.02 per cent), section of the fifth cranial nerve for tic douloureux, and 2 (0.04 per cent), osseous trauma.

In the medical service, 26 cases of pulmonary embolism were observed. Of these, the embolism was fatal in 6 (0.23 per cent); in 3 this was confirmed at autopsy. In the majority the patients were between the fifth and seventh decades of life and also had cardiac disease. The cases of the vast number of histories of patients treated for thromboembolic disease of the lower extremities were not reviewed.

COMMENT

The high incidence of thromboembolism following genitourinary operations, particularly those performed on the prostate, prompted me to seek efficient prophylactic measures. My observations have convinced me of the wisdom of placing all patients in the Trendelenburg position immediately after the operation. The foot of the bed is kept elevated until exercise and ambulation can be started. Trauma to the veins of the lower extremities is prevented by periodic raising of the legs, turning of the patient from side to side, etc. Although a pressure bandage accomplishes much, elevating the foot of the bed is simpler and more practical and may be used in all cases—even if a thrombotic condition or a cutaneous disease of the legs is present. All patients are given antibiotic therapy: Combiotic, 3 cc., with Chlor-Trimeton, 5 mg., once or twice a day.

During long operations also the patient is placed in the Trendelenburg position at

intervals, so as to augment the venous return flow.

During the past forty years (1917-1957) no fatal pulmonary emboli have been recorded as following numerous kidney operations when the Trendelenburg position was routinely used to maintain the kidney in normal position. In the past five years, with use of the same prophylactic measure, there has been no case of fatal embolism following 442 operations on the genitourinary tract.

In a series of 477 operations on the prostate (Southern Pacific Hospital, 1929-1948), 6 (0.12 per cent) instances of thromboembolic disease were recorded: 4 of thrombophlebitis, and 2 of pulmonary emboli (1 fatal).

At St. Mary's Hospital, 1952-1957, 1,662 of all operations were performed on the genitourinary tract; 9 (0.73 per cent) instances of thromboembolic disease occurred in 1,220 patients who had not been placed in the Trendelenburg position immediately after the operation (there were 6 fatal pulmonary emboli).

In our group of 442 patients, 3 instances (0.67 per cent) of nonfatal thromboembolic disease occurred when the foot of the bed was elevated. It is possible that a greater percentage of pulmonary emboli was discovered because every patient with pleuritic pain, hemoptysis or a febrile reaction was subjected to repeated roentgen examination for evidence of the characteristic, diffuse, increased density of the pulmonary area at the site of the embolus, so often confused with pneumonitis or pleuritis with effusion. In addition, the lower extremities were frequently palpated for tenderness in the vein or calf and in suspicious instances Homan's sign was used to aid early detection.

After 408 prostatic operations, 6 instances (1.4 per cent) of pulmonary emboli (4 fatal) occurred when the foot of the bed was not elevated. When the foot of the bed was elevated after 184 prostate operations, only 2 (1.08 per cent) emboli occurred and these were nonfatal.

The incidence of pulmonary embolism was less and the fatality rate decidedly lower in the group in which the Trendelenburg position was routinely used after the operation. This was due to the increased venous circulation established in the immediate postoperative period. It minimized the accumulation of sludged blood and prevented the formation and promulgation of clots, which are the precursors of pulmonary embolism.

As soon as thromboembolic disease is evident, anticoagulant therapy is instituted. I prefer the Bauer method of heparinization (without Dicumarol, which is apt to cause postoperative hemorrhage). Wessler and his associates demonstrated by recent experiments the inefficacy of Dicumarol in controlling hypercoagulability when used for only a short period. They suggest that heparin may be a more effective anticoagulant thrombolic agent. In my opinion, trypsin should be used only to treat chronic recurrent thrombophlebitis. The Trendelenburg position is maintained and antibiotic therapy continued or augmented. To relieve pain and prevent edema, the legs may be bandaged snugly but not tightly. Hot compresses or ice bags may be applied and passive and active exercise instituted as soon as the febrile reaction subsides.

I prefer not to ligate the femoral veins. I do not recommend the major procedures of paravertebral block or lumbar sympathectomy, as proposed by Lériche, for relief of postoperative phlebitis and prevention of embolism, as very good results can be obtained with the conservative measures aforedescribed.

SUMMARY

Elevation of the foot of the bed and exercise immediately after operation are

the most effective prophylactic measures for the prevention of thromboembolic disease following genitourinary operations. The Trendelenburg position is simple, requires no special technic and is both inexpensive and harmless. It can be used for all patients—even before ambulation can be instituted—and also when pressure bandage or anticoagulant therapy is contraindicated. It prevents venous stagnation and minimizes the resistance of sludged blood. It eliminates blood pooling, lessens the development and propagation of clots and minimizes detachment and formation of larger, fatal pulmonary emboli.

During the past five years, 50 instances of thromboembolic disease complicated 14,877 major operations: 18 fatal and 22 nonfatal pulmonary emboli and 10 instances of thrombosis of the legs. Of the 1,662 patients who underwent genitourinary operations, 1,220 were not placed in the Trendelenburg position immediately after the operation. Thromboembolic disease occurred in 9 patients and fatal pulmonary emboli in 6.

In the author's group of 442 operations the foot of the bed was routinely elevated. Nonfatal thrombotic disease occurred in 3 instances. All patients were meticulously scrutinized for venous thrombosis and/or pulmonary embolism.

When the foot of the bed was not elevated postoperatively after 408 prostatic operations, 6 pulmonary emboli occurred, of which 4 proved fatal. The Trendelenburg position was routinely used after 184 prostatic operations; only 2 nonfatal emboli occurred.

The incidence of pulmonary embolism is less, and the fatality rate decidedly lower, when the Trendelenburg position and exercise are routinely used after the operation.

The author heartily recommends the general postoperative use of these simple, inexpensive, effective prophylactic measures. They minimize the occurrence of thromboembolic disease after an operation.

RÉSUMÉ

La surélévation des pieds du lit et des exercices immédiatement après l'opération sont les meilleurs mesures prophylactiques des complications thrombo-emboliques après opérations génito-urinaires. La position de Trendelenburg est simple et sans danger, elle ne nécessite aucune technique spéciale. Elle peut être ordonnée dans tous les cas—même avant que le malade recommence à marcher — également lorsqu'un pansement de compression ou une thérapeutique anticoagulante sont contre-indiqués. Elle prévient la stase veineuse, réduit au minimum la viscosité sanguine, élimine l'agglutination sanguine, diminue la formation et la propagation de caillots, et réduit le risque de l'embolie pulmonaire fatale.

Durant les 5 dernières années il y a eu 50 cas de complications thrombo-emboliques sur 14.877 opérations majeures: 18 cas pulmonaires mortels, 22 cas pulmonaires non mortels et 10 cas de thromboses des membres inférieurs. Sur 1.662 cas d'opérations des voies génito-urinaires, 1.220 n'ont pas été placés en position de Trendelenburg immédiatement après l'opération. Il y a eu 9 cas de complications thrombo-emboliques et 1 cas d'embolie pulmonaire mortelle.

Dans le groupe de 442 opérations de l'auteur, les pieds du lit ont été systématiquement surélevés. Il y a eu 3 cas de thrombose non mortels.

Dans 408 opérations prostatiques les pieds n'ont pas été surélevés il y a eu 6 embolies pulmonaires dont 4 fatales. La position de Trendelenburg a été systématiquement adoptée dans 184 opérations prostatiques; résultat: seulement 2 embolies, non fatales.

La proportion des embolies pulmonaires est inférieure et le taux de mortalité nettement réduit avec la position de Trendelen-

burg et les exercices post-opératoires.

L'auteur recommande vivement la généralisation de ces mesures post-opératoires simples, peu coûteuses et efficaces.

RIASSUNTO

Nella profilassi della malattia tromboembolica dopo interventi sull'apparato genito-urinario, i due metodi più efficaci sono rappresentati dal sollevamento dei piedi del letto e dai movimenti degli arti, da iniziare subito dopo l'operazione. La posizione di Trendelemburg è semplice da ottenere e senza pericolo; può essere consigliata in qualunque malato, anche prima di farlo alzare e anche quando sia controindicata la terapia anti-coagulante. Questa posizione impedisce il ristagno venoso e facilità la circolazione; elimina o riduce lo sviluppo e la propagazione dei trombi e quindi il distacco di emboli.

Negli ultimi cinque anni si sono avuti 50 casi di malattia trombo-embolica su oltre 14.000 interventi; di essi, 18 furono embolie mortali, 22 non mortali e altri 10 tromboflebiti senza embolia. Su 1662 operati sulle vie genito-urinarie, 1220 non furono messi nella posizione di Trendelemburg e fra questi si ebbero 9 trombo-embolie e 6 embolie polmonari mortali. In altri 442 i piedi del letto furono sollevati e si ebbero solo 3 trombo-embolie. In un altro gruppo di 408 interventi sulla prostata, in cui i piedi del letto non furono sollevati, vi furono 6 embolie di cui 4 mortali; in altri 184, messi invece in posizione di Trendelemburg, vi furono solo due embolie non fatali.

In conclusione la frequenza dell'embolia polmonare diminuisce e la percentuale di mortalità si riduce sensibilmente quando venga usata la posizione di Trendelemburg e vengano fatti eseguire movimenti degli arti inferiori subito dopo l'operazione. L'autore pertanto raccomanda caldamente tali pratiche dopo ogni intervento.

ZUSAMMENFASSUNG

Die wirksamsten prophylaktischen Massnahmen zur Verhütung thrombotisch-embolischer Erkrankungen im Anschluss an Operationen des Harn- und Geschlechtsapparates bestehen in einer Erhöhung des Fussendes des Bettes und in der Einleitung von Körperübungen nach dem operativen Eingriff. Die Trendelenburgsche Lagerung ist einfach auszuführen, unschädlich, billig und erfordert keine besondere Technik. Sie lässt sich bei allen Kranken anwenden, auch bevor das Verlassen des Bettes gestattet werden kann, und auch wenn die Verwendung von Druckverbänden oder koagulationshemmenden Mitteln kontraindiziert ist. Die Beckenhochlagerung verhütet venöse Stauung und setzt den Widerstand geronnenen Blutes herab. Sie verhindert Blutansammlungen, verringert die Entstehung und Verschleppung von Blutgerinnseln und vermindert die Gefahr ihrer Ablösung und der Bildung grösserer tödlicher Lungenembolien.

Während der letzten fünf Jahre traten bei 14877 grösseren Operationen 50 Komplikationen durch thrombotisch-embolische Erkrankung auf: 18 tödliche und 22 nicht tödliche Lungenembolien und 10 Thrombosen der Beine. Von den 1662 Kranken, an denen Operationen des Harn- und Geschlechtsapparates vorgenommen waren, wurden 1220 nicht sofort nach der Operation in die Trendelenburgsche Lage gebracht. Thrombotisch-embolische Erkrankung trat bei 9 Kranken auf, tödliche Lungenembolie bei 6.

In der Serie des Verfassers, die aus 442 operativen Fällen besteht, wurde routinemässig eine Erhöhung des Fussendes des Bettes vorgenommen. Nicht tödliche thrombotisch-embolische Erkrankungen

traten dreimal auf. Alle Kranken wurden mit grösster Sorgfalt auf das Vorhandensein venöser Thrombosen oder von Lungenembolien oder beider Krankheitszustände untersucht.

Nach 408 Prostataoperationen, an deren Anschluss das Fussende des Bettes nicht erhöht wurde, traten 6 Lungenembolien auf, von denen 4 tödlich verliefen. Nach 184 Prostataoperationen mit anschliessender routinemässiger Beckenhochlagerung kamen nur 2 nicht tödliche Embolien vor.

Wenn die Trendelenburgsche Lagerung und Körperübungen routinemässig nach der Operation angewandt werden, treten Lungenembolien weniger häufig auf und sinkt die Sterblichkeit ganz entschieden.

Der Verfasser empfiehlt wärmstens die allgemeine postoperative Anwendung dieser einfachen, nicht kostspieligen und sehr wirksamen Vorbeugungsmassnahmen, die das Auftreten thrombotisch - embolischer Erkrankungen im Anschluss an eine Operation herabsetzen.

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The true student is a citizen of the world, the allegiance of whose soul, at any rate, is too precious to be restricted to a single country. The great minds, the great works transcend all limitations of time, of language, and of race, and the scholar can never feel initiated into the company of the elect until he can approach all of life's problems from the cosmopolitan standpoint. I care not in what subject he may work, the full knowledge cannot be reached without drawing on supplies from lands other than his own . . . I care not on what stream of knowledge he may embark, follow up its course, and the rivulets that feed it flow from many lands. If the work is to be effective he must keep in touch with scholars in other countries. How often has it happened that years of precious time have been given to a problem already solved or shown to be insoluble, because of the ignorance of what had been done elsewhere. And it is not only book knowledge and journal knowledge, but a knowledge of men that is needed. The student will, if possible, see the men in other lands. Travel not only widens the vision and gives certainties in place of vague surmises, but the personal contact with foreign workers enables him to appreciate better the failings or successes in his own line of work, perhaps to look with more charitable eyes on the work of some brother whose limitations and opportunities have been more restricted than his own.

—*Osler*

Obstetric and Gynecologic Surgery

Carcinoma of the Breast

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GRENOBLE, FRANCE

AT present surgeons in France are of the opinion that the treatment of carcinoma of the breast should be entirely reconsidered.

I do not refer, in making this statement, to new and special therapeutic practices such as hormonotherapy, chemotherapy, castration, adrenalectomy and hypophysectomy. These are only adjuvant and palliative means which are still in the experimental stage.

That to which I refer is the classic surgical and roentgen treatment, which many of the French specialists wish to modify.

The following outline of the classic treatment conforms exactly to the version presented in 1948 before the Fifty-second French Surgical Congress:

1. Carcinoma in the first stage (Steinthal) with no ganglionic invasion whatsoever: Halsted operation without associated roentgen therapy.

2. Carcinoma in the second stage, which in France is subdivided, since the work of Tailhefer, into the primary second stage, and the advanced second stage.

Primary second stage (the lymph nodes of the armpit are only partially invaded): Halsted operation followed by roentgen therapy. Advanced second stage (the nodes of the armpit are invaded to a large extent): preoperative roentgen therapy, Halsted operation and postoperative roentgen therapy.

3. Carcinoma in the third stage (Steinthal): The same treatment as for the advanced second stage, or, more frequently, roentgen therapy without operation, supraclavicular lymphadenectomy being practically abandoned.

Such was the official therapeutic outline. To this, however, should be added a few rules that are still followed:

The old rule of not operating on rapidly developing "acute" carcinoma of the mastitis-carcinomatous type and entrusting them, without hope, to roentgen therapy.

The more recent rule by which roentgen therapy of cancers "in active development," regardless of their stage of advancement, must precede the operation—"active development" being characterized by pseudoinflammatory aspect, edema of the skin and the rapid growth of the tumor and nodes.

At present, however, this official treatment is again under discussion, and for a highly essential reason: The results obtained by this method are mediocre.

The 1948 Congress, at the same time it rendered official and codified the treatment of mammary carcinoma, condemned the method of showing figures to support the results obtained, which, more often than not, were insufficient.

The global results of the two specialists reporting were as follows: Ducuing, 40 per cent of five-year survivals; Tailhefer, 49 per cent.

Since 1948, in reaction to this situation,

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three therapeutic trends have developed:

1. Certain surgeons, deceived by the Halsted operation, contented themselves with simple mammectomy leaving to roentgen therapy the treatment of the adenopathies. This meant adoption of the MacWhirter method, which would have brought about, and at less cost, results the same as or superior to those obtained by the usual method.

The global result for MacWhirter was 56 per cent of five-year survivals; for his pupil Demmer, 55 per cent. These figures, however, have not been confirmed by all who employ these methods. In fact, the majority of the French specialists who follow the Edinburg method have not yet been able to observe the results for sufficient time to contribute any valid statistics. In a manner of speaking, the process is still in the experimental stage.

2. Other radiotherapists who treat carcinoma, following the known work of Lenz in New York, and more recently that of Baclesse in Paris, are convinced that radiotherapy for mammary carcinoma has been, up until now, administered in insufficient doses. According to these specialists, the minimum dose is 6,000 r for tumors and an equal amount for the nodes, a dose which has rarely been given.

Such a theory has led certain specialists, such as Lamarque of Montpellier, to demand the right to treat all mammary carcinomas by radiotherapy in sufficient doses. In fact, the experiment is only beginning.

3. The third therapeutic trend seems the most interesting, as it results from a new and unquestionable fact: the discovery of lymphatic invasions, particularly of the internal mammary chain, which until now have been poorly known and consequently neglected. The credit for this discovery is due to R. S. Handley of London. Several years were to pass and several other surgeons were to make the same discovery, however, before any practical benefits could be derived therefrom.

Invasion of the internal mammary nodes was noted by a dozen specialists to be frequent and in the same proportions: 1 out of 3 or 1 out of 5, depending on whether or not the core of the tumor was internal or external. It was logical to attribute to this little known and neglected invasion, a

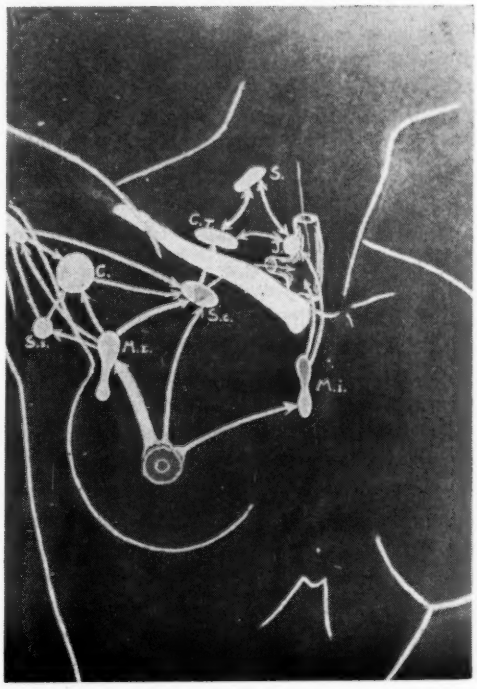

Fig. 1.—Diagram of principal mammary lymphatic groups: internal mammary and axillary nodes, primary relays and supraclavicular nodes; secondary relay. Object of intervention is to remove all invaded nodes with breast. Author invariably takes out internal mammary and axillary nodes, because they are primary relays. In France this is called operation with "double curage ganglionnaire." During this intervention, nodes which have just been removed are immediately examined by histologist. If nodes located highest in armpit and running full length of internal mammary vessels are not affected, operation is finished. If the contrary is true, a preventive supraclavicular lymphadenectomy is performed.

part of the responsibility for our therapeutic setbacks.

It was normal, therefore, to propose, for the improvement of our results, ablation of this lymphatic group, as Halsted had done more than fifty years before for the axillary group.

In addition, it became evident that the supraclavicular lymphadenectomy, the secondary lymphatic stage, had been performed in an illogical manner, since growth of the neoplasm had been made possible by the internal mammary chain (primary stage), until then neglected. It was therefore necessary to develop a more radical operation.

In France the first operations, with ablation of the internal mammary nodes, were performed in Grenoble, and also in Paris, under the direction of Dr. Redon at the Cancer Institute.

I performed my own first such operation in July 1951. The patient is now in perfect health after five years, in spite of the fact that the internal mammary nodes had been invaded.

Grenoble, however, is a small city, and I have no important personal statistics to offer at present. By 1954, Redon himself had performed one hundred interventions in two years, and still does not consider himself justified in publishing statistics after this length of time.

This year, in France, the question was broached at two Congresses: that of the French Chapter of the International College of Surgeons, that of the Medical Days of France, at which I was speaker on the question. I had the satisfaction of hearing the enlarged operation recommended by other specialists, in particular by Profs. Jentzer of Geneva, de Vernejoul of Marseille and Ducuing of Toulouse.

I was able, by virtue of an investigation I made among a large number of specialists for the purpose of my report, to note that eminent French surgeons had become supporters of a more radical procedure. To my professors and friends, Funck-Brentano and Moulonguet in Paris, my friend Tailhefer of the Curie Institute, Lortat Jacob, Huguier, Moyse in Paris, Magendie, Darmaillaq and Laporte in Bordeaux and still others I have been able to bring the first far-away results of this innovation, thanks to the kindness of Dahl Iversen of Copenhagen and Urban of New York. Dahl Iversen wrote me as follows:

"Until now, I have operated 350 times, using my extented radical operation (resection of the axillary, internal mammary and supraclavicular lymph nodes). The material will be published when, in one year's time, I shall have completed five years of observation of approximately the first 100 cases.

"Follow-up observations covering three to four years have shown a survival percentage of 84."

And Urban wrote:

"I have now done 225 cases with only 1 postoperative death. Our three-year survival rate (on 70 cases) is 81 per cent, as compared with the usual three-year survival rate of about 63 per cent."

If one considers that the great majority of recurrences and metastases (between 87 and 92 per cent, depending on the therapeutic method employed, according to figures cited by Prof. Ducuing in his 1948 report), occur within three years from the date of operation, one must admit that the results obtained by Dahl Iversen and Urban are remarkable.

In the face of such results for operable carcinomas according to Haggansen and Stout's experiments, i.e., tumors in the first and second stages, it must be recognized that the experiment of the enlarged operation merits continuation, especially as the operative mortality rate is no greater than that involved in the classic Halsted operation, and that all surgeons are agreed as to the benignity of this procedure.

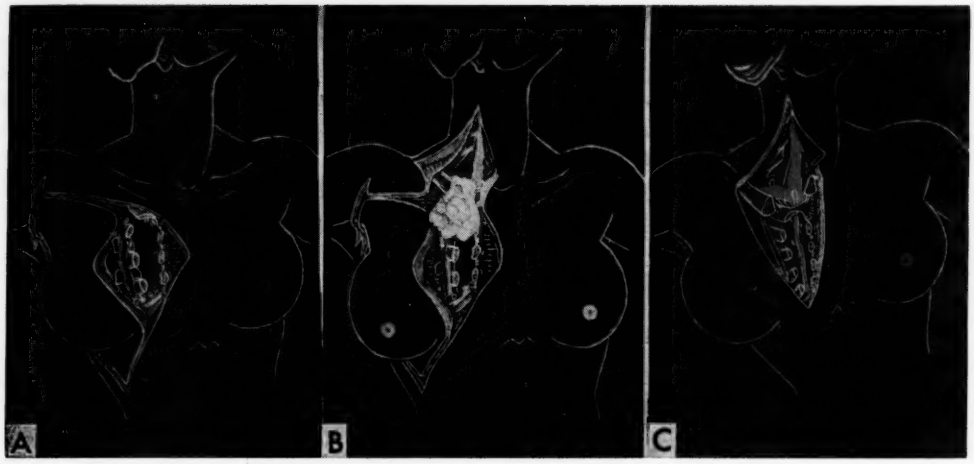

Fig. 2.—*A*, diagram of "double curage" operation. Here we see the curage of the internal mammary, the axillary curage being performed in the classic manner. *B*, diagram of "triple curage" operation. The internal mammary nodes of the second space were invaded. Operation is finished by supraclavicular lymphadenectomy without touching the clavicle. This is the time sketch here. *C*, the super-radical Halsted (personal style) for advanced mammary carcinoma. First phase of operation is represented. Clavicle is separated from sternum during procedure. Second phase, performed several days later, is classic Halsted operation. Advantages of the two-phase operation, in author's opinion, are (1) reduction of the risks of operative shock, and (2) the fact that it permits one, if the first nodes removed are invaded between the first and second operations, to administer interoperative roentgen therapy.

Nevertheless, there remains a problem: that of the more advanced carcinomas, those in the third stage (Steinthal), in which the supraclavicular nodes have already been invaded. Should operation be renounced? Or, on the contrary, should one conclude that the surgical treatment hitherto has not been comprehensive enough, and that more radical operations should be attempted?

In my opinion, the primary results of the enlarged operation in the successful cases should encourage surgeons to extend its benefits to patients with advanced carcinoma.

Wangensteen, for several years, has been treating such carcinomas with great courage, but the operative mortality rate of the super-radical Halsted operation is too high. In one of his latest publications, Wangensteen admitted that his operative mortality rate was 12 per cent. He hopes soon to reduce this figure to 5 per cent, which in my opinion, is still too high.

I also have perfected an operative technic, based on the same principle but nevertheless slightly different and, above all comprising fewer immediate risks. This is because I perform the operation in two stages. The future will show whether or not I am on the right road.

In the meanwhile, the accompanying illustrations and their legends will explain the manner in which mammary carcinoma is treated in Grenoble at present. Naturally, following the rules enumerated earlier, I combine the enlarged surgical treatment with roentgen therapy.

SUMMARY

The author considers the problem of mammary carcinoma and its treatment, since the classic methods have not been

satisfactory. At present, in France, three new therapeutic trends have developed: (1) treatment by simple mammectomy, with roentgen irradiation therapy for the adenopathic conditions; (2) substantial increases in the amount of radiation hitherto employed, and (3) a combination of more extensive resection and well-directed roentgen therapy. The author favors the third approach, although it is admittedly the most difficult. He considers the first results of its use decidedly promising.

ZUSAMMENFASSUNG

Der Verfasser unterzieht das Problem des Brustkrebses und seiner Behandlung einer Nachprüfung, da die klassischen therapeutischen Methoden sich als unbefriedigend erwiesen haben. In Frankreich haben sich drei neue Tendenzen in der Behandlung des Brustkrebses entwickelt: 1.) die einfache Resektion der Brustdrüse kombiniert mit Strahlenbehandlung der erkrankten Lymphdrüsen, 2.) erhebliche Erhöhung der bisher angewandten Bestrahlungsdosen und 3.) die Kombination einer umfangreicheren Resektion mit sorgfältig gezielter Röntgenbestrahlung. Der Verfasser bevorzugt den letzten dieser drei Vorschläge, wenn er auch zugibt, dass dieser der schwierigste ist; die ersten Ergebnisse der Ausführung erscheinen ihm zweifellos ermutigend.

RÉSUMÉ

L'auteur estime qu'il faut reconsidérer le problème du carcinome du sein et son traitement, les méthodes classiques ne s'étant pas avérées satisfaisantes. L'on distinque actuellement trois tendances en France: 1) Mammectomie simple avec irradiation aux rayons á pour les états adénopathiques; 2) Augmentation importante des doses d'irradiation; 3) Combinaison d'une résection plus large et d'une irradiation radiothérapique bien dirigée. L'auteur est en faveur de la troisième technique bien qu'il soit reconnu qu'elle est la plus difficile, et les premiers résultats obtenus sont pleins de promesses.

RIASSUNTO

L'Autore torna a prendere in considerazione il problema del cancro della mammella e della sua cura, dato che i metodi attualmente in uso non hanno dato risultati soddisfacenti. Oggi, in Francia, si sono sviluppate tre nuove tendenze: 1) mastectomia semplice e roentgen-terapia delle linfadenopatie; 2) aumento delle dosi di raggi fino ad oggi impiegate; 3) associazione di mastectomie più estese con una ben diretta roentgen-terapia. L'autore preferisce quest'ultimo metodo, per quanto il più difficile dei tre, da cui ha avuto risultati decisamente promettenti.

RESUMEN

El autor estudia de nuevo el problema del carcinoma mamario y su tratamiento ya que los métodos clásicos no han sido satisfactorios. Hoy día en Francia se siguen tres intentos terapéuticos: 1. tratamiento por simple mastectomia; 2. aumento substancial de la cantidad de radiación empleada hasta ahora; 3. una combinación y resección más extensa y radioterapia biém dirigida.

El autor es partidario del 3. intento, reconocido como el más dificil, y considera los resultados de su empleo decididamente prometedores.

Primiparous Breech: Its Practical Management During Labor

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THE management of the mature primiparous breech presentation in labor has always presented, and in fact still presents, a problem that requires crystal-clear judgment. This paper will not be concerned with the exact technic of vaginal delivery of the breech presentation in the primipara, but more with an analysis of the thoughts that stream through the obstetrician's mind during the conduct of this labor.

In a term breech presentation there can be no true test of labor to determine whether or not cephalopelvic disproportion is present. One cannot rely on instinct alone (although frequently that word is used when experience is meant), but one must make use of definite guideposts to bring the labor to a successful termination.

Statistically, 3.5 to 4 per cent of all term deliveries involve breech presentations, and according to Dieckman[1] the prenatal mortality is three to eight times as great as with vertex presentations. The obstetrician who is faced with this problem must use every means at his disposal to evaluate properly each individual patient.

First, an intimate knowledge of the patient's history is essential: age, gravidity, history of infertility, previous miscarriages, previous stillbirths—all must of necessity influence the obstetrician's thinking in his conduct of this patient's labor. Second, proper evaluation of the patient's pelvis, both clinically and by roentgen ray, must be obtained. In every case of breech presentation in a primigravida, complete roentgen pelvimetric studies should be done. It is essential that the obstetrician have a complete picture of the architecture of the pelvis, know its inlet, midplane and outlet measurements and, perhaps of less importance, the position of the fetus. This knowledge will definitely influence his management of labor and assist him to ascertain whether any labor should be permitted at all, or whether a short trial or a longer period of labor should be permitted. Third, an attempt to evaluate the size of the baby clinically is extremely important; this is not always easy. Roentgen cephalometric studies, even in expert hands, are not reliable. The successful management of a 6-pound primiparous breech baby from below and that of a 9-pound one may vary greatly. Fourth, the complication of a prolapsed cord, which is much more frequent in this presentation than in others, must be borne in mind. All these pertinent factors combined make up the whole that determines the final decision in managing of the mature primiparous breech.

In reviewing the literature it can be noted that maternal mortality statistics, perinatal mortality and morbidity and the incidence of cesarean section for the mature primiparous breech vary in different clinics.

It is interesting to note some of the statistical studies that have been made on breech deliveries. Dieckman and Harrod[2] noted that from 1945 to 1952, in the de-

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livery of 754 such deliveries, the corrected stillbirth and neonatal loss was 0.9 per cent. This is low, but this includes the multiparous breech with its attendant lower fetal mortality rate. The rate of cesarean section was 12 per cent. This also included both primiparous and multiparous breeches. The corrected fetal mortality rate in cases of cesarean section was 1.1 per cent. Incidentally, there were serious birth injuries in 2.2 per cent of all the babies born. Pomerance and Daichman,[3] in reviewing 716 breeches, noted that 95 were delivered by cesarean section, a rate of 13.2 per cent. There were 32 stillbirths, a 4.5 per cent mortality rate; this, however, was uncorrected. It was interesting to note that of 20 babies who weighed 9 pounds or more, 5 were stillborn, a 25 per cent mortality rate. Two of the 95 cesarean sections were fatal, and there was no fetal mortality rate. Daly and Michael,[4] reviewing 317 primigravida breech presentations, recorded the fact that only 21 sections (6.6 per cent) were done. There was an overall fetal mortality rate, corrected, of 1.9 per cent.

Knight and O'Connell[5] analyzed 658 breech presentations from 1939 to 1948. There were 12 fetal deaths, an incidence of 1.8 per cent; 60 sections were done, an incidence of 9 per cent. Since the collecting of these figures ceased in 1948, is is quite likely that the incidence of cesarean section in breech presentations has been higher in the last nine years. Shutz and his colleagues,[6] discussing the fetal mortality associated with primiparous breech presentation, estimated the percentage at 4.12 per cent. Nobel and his co-workers[7] noted an incidence of 13.3 per cent of cesarean sections in breech presentations, with a gross fetal mortality rate of 11.1 per cent. This, of course, was not corrected, and the true figure was not given. Goetbals,[8] analyzing primiparous breech presentations at the Boston Lying-In Hospital from 1940 to 1952, observed a corrected 11.2 per cent incidence of cesarean section for the uncomplicated primiparous breech. There was no fetal mortality among the babies born by section, but there was a corrected 2.6 per cent fetal mortality rate among the babies delivered by the vaginal route—an overall fetal mortality of 2.3 per cent.

I should like to review the primiparous breech deliveries at the Beth Israel Hospital of Boston from the inception of its obstetric service, on March 1, 1950, to March 1, 1957, a period of seven years. It may be of interest to note the fact that the staff of the Obstetrical Service of this hospital is composed of obstetricians all of whom are Diplomates of the American Board of Obstetrics and Gynecology or, as in the case of some of the younger men, eligible to become so. The ratio of private patients to ward patients is approximately 4 to 1. Ward patients who present complications, however, are seen in consultation by the visiting obstetrician on service, and the course of management and treatment follow closely that of the private patients.

In the obstetric service at the Beth Israel Hospital from 1950 to 1957, there were 222 mature primiparous breech presentations. Only babies born weighing 2,500 Gm. (5 pounds) or more were considered, and twins were not included in the statistical survey. Forty-seven sections were done, an incidence of 21.1 per cent; 5 of these sections, however, were done for significant complications in no way related to the presentation and can be listed as follows: (1) premature separation of the placenta with hemorrhage; (2) congenital constriction of the vagina; (3) severe preeclampsia (2 cases), and (4) diabetes. Subtracting these five sections leaves a corrected rate of 18.9 per cent. An analysis of these 42 sections may be of interest. Eight were done for cephalopelvic disproportion, both by roentgen deter-

mination and clinical signs. These patients were given a trial of labor, but, as has been mentioned earlier, complete studies and evaluation of the pelvis were made beforehand, so that the pitfalls were well marked out. With all the facts known, the patient was not permitted a long labor that might have been permitted had her pelvis been adequate and the size of the fetus properly estimated as average. There were 6 cases of long-standing infertility. In 2 of these elective sections were done, and in the other 4 a trial of labor was permitted; again, these trials were shorter than they would ordinarily have been, averaging seven to eight hours. There were ten elderly primiparae, varying from 34 to 42 years of age. Three of these sections were done electively, and 7 patients were given an adequate trial of labor. There were 18 cases of prolonged labor in which cervical dilatation was slow, labor desultory and the descent of the presenting part slow. Some of the pelves were of the borderline type.

The size of the baby is always estimated and recorded at the onset of labor, and many of these were correctly estimated at over 8 pounds (3,628 Gm.). Labor in these 18 cases ranged from twelve to thirty-six hours. It is interesting to note that 11 of the 18 babies weighed from 8 to 9 pounds (3,628 to 4,082 Gm.) at birth. There seems to be a definite relation between a large baby and the duration of labor in the primiparous breech; when the labor is slow and prolonged one must estimate the size of the baby; in probably 60 per cent of the cases the fetus is over 8 pounds in weight.

In this group there were 5 fetal deaths. Three of the infants showed congenital anomalies that were incompatible with life in any circumstances, so that there was a corrected fetal mortality rate of only 2, or a death rate of 0.92 per cent. One stillborn child was delivered from below and 1 stillborn by cesarean section. There was no maternal mortality. It may be of interest to discuss briefly these two fetal deaths.

CASE 1.—Mrs. L. E., a 25-year-old primipara, had adequate measurements, with a fetus estimated at 6½ to 7 pounds. She had a good progressive labor, and dilatation was complete after about twelve hours. It was a frank breech presentation, and at full dilatation the breech was still above the spines. The contractions continued strong, and she made slow, steady progress in bringing the breech onto the perineum. It may be easier to follow this case if times were put in. Dilatation was complete at 12:15 p.m. and she was making slow, steady progress; at 2:15 p.m., two hours later, the fetal heart appeared good and the breech was just off the perineum. At 2:35 no fetal heart beat could be detected. Delivery was accomplished by decomposition with no unusual difficulty, but a stillborn fetus weighing 6 pounds and 2 ounces was delivered.

In retrospect, one can learn several things from this particular case. First, that in a long second stage something can happen to the fetus; that after full dilatation, when progress is very slow or has stopped, the child should be delivered either by decomposition or by whatever means is best determined by the obstetrician. Second, it is very important, after full dilatation has occurred, that the fetal heart beat be obtained after every contraction, and if there is any variation in the fetal heart tones or any sign of fetal distress, delivery should be performed immediately. In this case there was a twenty-minute lapse between the counting of the fetal heart rate, and in the interim, for some reason, the fetal heart beat disappeared. Incidentally, postmortem examination of the fetus disclosed no abnormalities. The exact cause of death was never determined.

CASE 2.—Mrs. M. W., a 25-year-old primigravida, was by dates four weeks overdue. The estimated size of the baby was recorded as 6½ pounds. She was brought into the hos-

pital for induction; the presenting part was high, just dipping into the pelvis, and apparently this time it was thought to be a vertex presentation. The membranes were ruptured on Nov. 3, 1955, at 10:15 a.m. The patient did not go into active labor, and eight hours later an intravenous pitocin drip was started. No labor could be stimulated, so the drip was discontinued.

The next day, November 4, at 1 p.m. (about fifteen hours after artificial rupture of the membranes), contractions were at six to eight minute intervals, lasting thirty seconds. At 6 p.m. a sterile vaginal examination disclosed a frank breech presentation above the spines and the cervix dilated to about 5 to 6 cm. and quite thick. The fetal heart rate dropped once to 120 per minute but soon returned to 140. For the next six hours labor was desultory, and at midnight there was no change in the cervix. At 12:50 a.m. (November 5) the fetal heart beat became irregular, and an immediate section was done, with the delivery of a stillborn weighing 6 pounds and 13 ounces. The uterus was opened at the lower uterine segment, the cord popped into the wound, and there was probably an occult prolapse.

The significant features of this case are, of course, self-explanatory. First, the original diagnosis of a breech presentation was not made. I doubt, if it had been, whether the obstetrician would have brought the patient into the hospital for induction, despite the fact that she was four weeks overdue by date. One of the important features in the management of a primiparous breech is the substitution of the occasional sterile vaginal examination for the frequent rectal examination. If at the end of six or eight hours of labor progress is slow, a thorough evaluation of the pelvis, the presenting part and occult prolapse of the cord can be determined by vaginal examination. This should be repeated in another six to eight hours if progress is still slow, labor is desultory and the exact condition of the cervix is to be made out.

SUMMARY AND CONCLUSIONS

In summarizing management of labor in the primiparous breech presentation, certain definite guideposts have to be followed. A complete history of the patient must be obtained. Age, gravidity, history of infertility, previous miscarriages, stillbirths, all are significant. Complete roentgen pelvimetric evaluation of the pelvis should be obtained in every case. It is important that an attempt as accurate as possible should be made to evaluate clinically the size of the fetus, since a large percentage of prolonged labors are due to babies that weigh over 8 pounds (3,629 Gm.). The progress of labor should be followed by occasional sterile vaginal examinations, especially if it is slow. Of 222 cases in which mature infants of primiparous mothers delivered with breech presentation at the Beth Israel Hospital in Boston, there was a corrected incidence of 18.9 per cent of cesarean sections with corrected fetal mortality rate of 0.92 per cent. The obstetric staff is composed of members who are all Diplomates of the American Board of Obstetrics and Gynecology or are eligible to be, and in their hands, with the liberalization of indications for cesarean sections, there was no maternal mortality and a fetal mortality rate no higher than that associated with ordinary vertex presentations.

ZUSAMMENFASSUNG UND SCHLUSSFOLGERUNGEN

Bei der Zusammenfassung der Durchführung der Entbindung von Erstgebärenden, bei denen eine Steisslage festgestellt ist, muss man einem genau festgelegten Plane folgen. Die Erhebung einer umfassenden Krankheitsgeschichte ist notwendig. Alter, Gewicht, frühere Unfruchtbarkeit, Fehlgeburten und Totgeburten sind von Wichtigkeit.

In jedem Fall sollte eine genaue röntgenologische Feststellung der Beckenmasse erfolgen. Es ist wichtig, eine möglichst genaue klinische Erfassung der Grösse des Fötus zu versuchen, da ein grosser Prozentsatz der Fälle von verlängerter Wehentätigkeit auf ein Gewicht des Fötus von uber 8 Pfund zurückzuführen ist. Der Fortschritt des Geburtsverlaufes sollte, besonders wenn er langsam ist, durch gelegentliche sterile vaginale Untersuchungen verfolgt werden. Im Beth Israel Hospital in Boston betrug unter 222 Fällen, in denen Erstgebärende von reifen Kindern entbunden wurden, der korrigierte Prozentsatz von Kaiserschnitten 18,9 mit einer korrigierten fötalen Sterblichkeit von 0,92 Prozent. Der geburtshilfliche Ärztestab besteht ausschliesslich aus Spezialisten, die vom American Board of Obstetrics and Gynecology anerkannt oder zur Zulassung berechtigt sind. In ihren Händen kam es bei liberaler Auslegung der Indikation zum Kaiserschnitt zu keinem mütterlichen Todesfall, und die Sterblichkeit des Fötus war nicht höher als bei gewöhnlicher Scheitellage.

RIASSUNTO E CONCLUSIONI

La presentazione podalica, nelle primipare, richiede una assistenza che deve essere basata su vari elementi. Innanzi tutto si deve raccogliere una storia completa della gestante; ha importanza l'età, la nozione di aborti précedenti o di nati-morti.

Si deve poi eseguire una pelvimetria completa; valutare clinicamente nella maniera più accurata possibile le dimensioni del feto, poichè è noto che i travagli più laboriosi sono dovuti a feti che pesino oltre i 4 Kg.

Il progredire del parto deve essere seguito con periodici esami vaginali, sopratutto se avviene lentamente.

Su 22 parti a termine di primipare, all' Ospedale Beth Israel di Boston, vi fu una percentuale del 18,9% di tagli cesarei, con una mortalità fetale del 0,92%. Le assistenti ostetriche sono tutte diplomate all' American Board of Obstetrics, o stanno per esserlo, e nelle loro mani non vi fu mortalità materna e la mortalità fetale non fu maggiore di quella che si riscontra nelle presentazioni di vertice.

RÉSUMÉ ET CONCLUSIONS

En résumant la conduite du travail lors de la présentation du siège chez les primipares, certaines règles bien définies doivent être suivies. Une anamnèse complète est nècessaire.

Il faut pratiquer dans chaque cas un examen radiologique pelvimétrique, et tenter d'évaluer cliniquement le volume du foetus, car dans un grand pourcentage de cas le travail prolongé est dû au fait que le nouveau-né pèse plus de 8 livres. La progression du travail, surtout lorsqu'il est lent, devrait être suivie par des examens vaginaux stériles répétés. Au Beth Israel Hospital de Boston, sur 222 cas d'accouchements à terme, on a compté un pourcentage corrigé de 18,9% de césariennes avec une mortalité foetale corrigée de 0,92%. L'équipe d'obstétrique est composée de membres du American Board of Obstetrics and Gynecology, ou sont d'un niveau équivalent, et ils n'ont eu à déplorer, avec l'élargissement des indications de la césarienne, aucune mortalité maternelle; quant au taux de la mortalité foetale, il n'a pas dépassé celui de la présentation du vertex.

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State education is obviously necessary, but as obviously involves certain dangers against which there ought to be safeguards. The evils to be feared were seen in their full magnitude in Nazi Germany and are still seen in Russia. Where these evils prevail no man can teach unless he subscribes to a dogmatic creed which few people of free intelligence are likely to accept sincerely. Not only must he subscribe to a creed, but he must condone abominations and carefully abstain from speaking his mind on current events. So long as he is teaching only the alphabet and the multiplication table, as to which no controversies arise, official dogmas do not necessarily warp his instruction; but even while he is teaching these elements he is expected, in totalitarian countries, not to employ the methods which he thinks most likely to achieve the scholastic result, but to instill fear, subservience, and blind obedience by demanding unquestioned submission to his authority. And as soon as he passes beyond the bare elements, he is obliged to take the official view on all controversial questions. The result is that the young in Nazi Germany became, and in Russia become, fanatical bigots, ignorant of the world outside their own country, totally unaccustomed to free discussion, and not aware that their opinions can be questioned without wickedness.

—*Russell*

Perhaps as many truths are current among men as fallacies; as many good as bad qualities; as many pleasures as troubles: but we love to criticize human nature in our efforts to rise above our species, and enrich ourselves with the dignity of which we would strip it. We are so confident as to fancy we can separate our personal interest from that of mankind and disparage the race without involving ourselves. This silly vanity has filled the philosophers' writings with invectives against nature. Man is just now quite out of favour with all thinking persons, and there is a general rivalry to task him with the greatest multitude of vices. Perhaps, however, his reputation is just at a turning-point, and he is about to recover all his virtues; for systems have their fashions as much as clothes, music, architecture, or anything else.

—*Vauvenargues*

Ophthalmologic Surgery

Dacryocystorhinostomy with Polyethylene Tubing: A Simplified Technic

A Preliminary Report

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OF the numerous types of operation that have been devised for the purpose of reestablishing the lacrimal-nasal drainage of tears, I am here concerned primarily with the combined endonasal-external technics to which the term "dacryocystorhinostomy" was given early in the twentieth century.

In 1904 the Florentine Toti[1] conceived, or rather revived, an idea known since the time of the Romans—remedying the unsuccessful effects of extirpation of the lacrimal gland in the lacrimal fossa. Galen himself proposed to break through an obliterated or obstructed lacrimal duct via the lacrimal bone and introduce a caustic substance that would prevent closure of the newly formed passage. This method of establishing a new path from the lacrimal sac into the nose was popular from 1840 to 1860, but waned thereafter until reintroduced by Toti in Italy and Aubaret[2] in France in the first decade of the twentieth century.

It is interesting to note that Scarpa's method of probing a stenosed lacrimal passage with a lead "nail," often to the point of penetrating the nasolacrimal canal, was still in use almost a hundred and twenty years after its invention around 1800.[3]

In Toti's procedure, after incision of the skin, the internal wall of the sac is dissected and freed. This exposes the lacrimal fossa. With gouge and hammer the anterior lacrimal crest and nasal bone are resected and the internal wall of the sac is extirpated and juxtaposed in the nasal mucosa.

As outlined by Arruga,[4] there have been many modifications of this principle since Toti's time. One of the earliest was a technic devised by Cirincione in 1904.[5] It comprised dissecting the lacrimal sac and duct, freeing them up to the canaliculus and then tucking the sac into a perforation made through the nasal wall into the middle meatus. Circinione regarded this method of utilizing the mucous membrane of the sac as lining for the canal through the bone as excelling Toti's procedure.

Von Blaskovics,[6] and, with a similar technic, Fernández Balbuena[7] removed the entire lacrimal sac and resected the bone and nasal mucosa of the lacrimal fossa all in one step, thereby attaining somewhat better results than those reported by Toti (15 to 20 per cent vs. 10 to 15 per cent).

In the Mosher[8] modification the anterior margin of the sac opening is sutured to that of the incised nasal mucosa with catgut. Arruga[9] tried a similar method in 1927 but abandoned it for a much improved procedure using electrically driven trephines, as will be described later. As

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improved by Martin and Cordes,[10] however, the Toti-Mosher operation was claimed to produce 75 to 80 per cent good results. In another variation of the Toti-Mosher operation reported by Goodyear,[11] the nasal wall of the sac is preserved and laid in two flaps into a large perforation made in the nasal bone. Only the skin is sutured.

Further and beneficial modifications of the Toti operation were originated by Dupuy-Dutemps and Bourguet[12] and Ohm,[13] i.e., the addition of suturing the nasal mucosa to the lacrimal sac. Exceptionally good results were claimed by the former authors.[14]

Numerous variations in the generally accepted dacryocystorhinosotomy technic have been reported that are based on the types of instruments used to perforate the lacrimal bone and on the method of suturing the mucous membranes. Duverger and Velter[15] used chisel and hammer or a dentist's drill to make the lacrimal opening and followed the Dupuy-Dutemps method of suturing. Basterra[16] resorted to dentist's drill and chisel, and sutured one anterior flap of the nasal mucosa to the anterior margin of the sac. Gutzeit[17] employed two special drills—one to perforate, the other to enlarge the lacrimal bone perforation—with two flap suturing. Mata[18] and Diaz-Caneja[19] also made use of these drills, but Mata preferred one-flap suturing.

Many other modifications of Toti's operation and technic have been reported, among them those of Weve and Kentgens,[20] Kuhnt,[21] Löwenstein,[22] Soria,[23] Raverdino,[24] Hogan,[25] Stock,[26] and Arruga.[9]

Arruga employs electrically powered trephines 5 to 10 mm. in diameter to facilitate perforation of the lacrimal bone. He uses two types of cylindric, hollow trephines, a centrally spiked one to begin the opening and a long one without the spike to complete the trephination. He also uses a special spatula that protects the sac during the operation and strong, toothed forceps to remove the walls of the ethmoid cells. He sutures the sac to the nasal mucosa with three fine silk sutures, the posterior flaps first and the anterior flaps second. The skin suturing is either interrupted or continuous, whichever gives the best cosmetic result. These sutures are removed in four or five days.

The dacryocystorhinostomy I use is a simplification of Arruga's and has given satisfactory and long-lasting results in restoring the normal function of the lacrimal-nasal drainage of tears. The chief modification is in a unique use of polyethylene tubing (Fig. 1) to create a permanent fistula between the nasal mucosa and that of the lacrimal sac. There are also differences in the approach to the lacrimal sac, in the method of incision, in the trephining and in the type of instruments used during the operation (Fig. 2).

Experimental work has demonstrated the value of polyethylene material in the anastomosis of tissues. It has been used as a dural substitute and in venoclysis. When polyethylene tubing was first introduced in ophthalmic surgery, it was employed for the relief of epiphora without resort to a major operation such as dacryocystorhinostomy.

Henderson[27] was one of the first to test the value of polyethylene tubing in reestablishing the patency of obstructed lacrimal canaliculi between the lacrimal puncta and the nasolacrimal duct. In his 5 cases, however, the best results were obtained when reconstruction of the canaliculus was combined with dacryocystorhinostomy. He used tubing 1 mm. in outside diameter and 50 mm. in length (lumen approximately 0.6 mm.). About 2 mm. was allowed to protrude into the cavity of the lacrimal sac and anchored there. The tubing was left in position between ten and thirty-six days, or longer.

Callahan[28] also reported favorably on the use of polyethylene tubing in the repair of stenosed and lacerated lacrimal canaliculi. Veirs[29] used polyethylene tubing (also a nylon rod) in the treatment of stenosis of the nasolacrimal sac, leaving it in place for a week. Even with polyethylene tubing left in sites as long as one hundred and thirty days, Henderson[27b] observed no evidence of any significant irritation. More recent investigations, however, attributed "persistent chronic conjunctivitis and discharge from the sac on pressure[30]" in 16 cases and of granuloma in 1 case.[31] Furthermore, Vicencio[30] observed that the Veirs[29] technic (tubing left *in situ* from six to five months) in stenosis of the nasolacrimal duct secondary to purulent chronic dacryocystitis failed to relieve the tearing, the discharge or the blocking of the ducts.

Failure to obtain permanent success was also described by Summerskill[32] after mere intubation of the nasolacrimal duct with polyethylene. When the lacrimal bone was perforated and one end of the polyethylene tube was passed through the orifice, the other remaining in the sac for permanent drainage, better results were obtained. Holland,[33] with some modification, recently achieved "almost consistently good results" in 36 cases with Summerskill's dacryocystorhinostomy.

The reasons are obvious why all the previous authors who more or less experimented with polyethylene tubing connecting the canaliculus with the nasal passages, could not obtain constant results. When the fine tubing used was approximately the same diameter as the canaliculus, it was not wide enough to create a permanent, sufficiently large fistula between the lacrimal sac and the nasal mucosa. On the other hand, if the tubing was very large, it created too large an aperture of the punctum and the canaliculus and therefore caused recurrent epiphora.

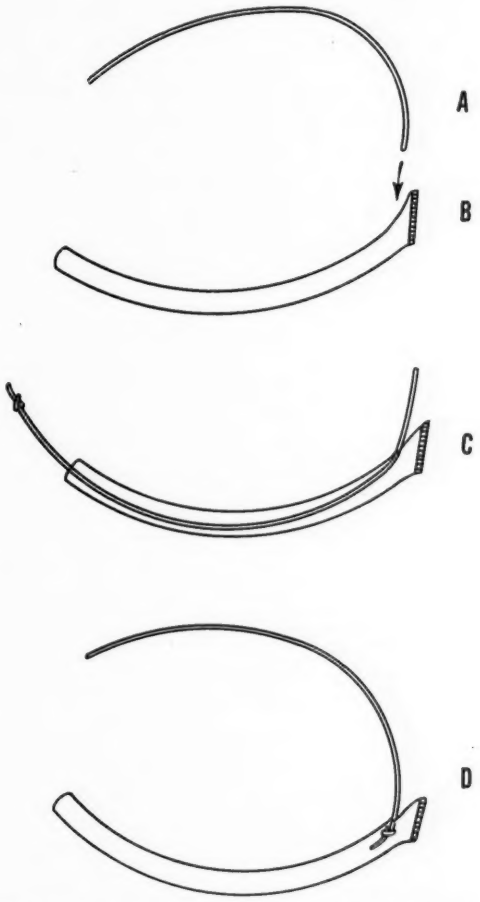

Fig. 1.—Polyethylene tubing. *A*, tubing of small caliber. *B*, tubing of large caliber with sealed end. *C*, small-caliber tubing introduced through perforation in large-caliber tubing and emerging end knotted. *D*, small-caliber tubing pulled back through large-caliber tubing with knot against perforation.

I encountered another difficulty with the standard dacryocystorhinostomy. This required an accurate approximation of the perforated sac wall to the nasal mucosa by direct sutures. But in my long experience failure resulted from the sloughing off of these sutures before a strong union of the approximated edges could be obtained.

My simplified method can eliminate these pitfalls because (1) a small tubing is inserted into the canaliculus that does not distort the normal lumen, and (2) larger tubing is laid across the artificial foramen, preventing osseous growth and giving the mucosae an opportunity to merge, thereby creating a large and permanent fistulization. It is surprising how well these tubes are tolerated in the canaliculus, as well as in the nasal cavity, for a long period.

Operation.—Good anesthesia is of paramount importance in dacryocystorhinostomy, general anesthesia being resorted to only in exceptional cases. The local anesthetic is applied through the nose by introducing a small cotton tampon soaked with a solution of cocaine 4 per cent with epinephrine 1:1,000 and inserting it all the way up the nasal cavity corresponding to the area that will be trephined. Externally, procaine hydrochloride, 2 to 4 per cent, is injected deeply into the region around and beyond the sac. One cc. is injected around the foramen of the supraorbital and infraorbital nerves.

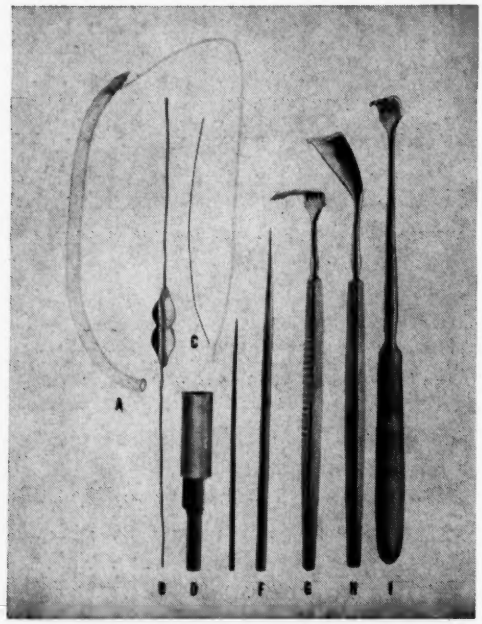

Fig. 2.—Main instruments used in dacryocystorhinostomy. *A*, polyethylene tubing. *B*, small stylus. *C*, Bowman lacrimal probe. *D*, Iliff-Stryker trephine. *E* and *F*, punctum dilators. *G*, retractor. *H*, Bonaccolto metal guard and trephine support. *I*, retractor.

A semilunar incision 2.5 cm. in length is then made on the skin, 3 mm. from the inner canthus, one-third of the incision above, and two-thirds below, the medial canthal ligament. This incision is deepened with blunt scissors, always with care to avoid the angular vein by withdrawing it toward the nose with a small retractor.

As soon as the medial ligament is exposed, it is used as a guide, and the section is carried down to its insertion at the anterior crest of the lacrimal fossa. At this point the ligament is grasped with fixation forceps and severed from its insertion. The periosteum is separated with a periosteal elevator all the way down to the fossa, which exposes the posterior wall of the lacrimal sac (Fig. 3).

An Iliff-Stryker[34] electric trephine 1 cm. in diameter is applied to the bone, one-half on the anterior crest, and the other half on the lacrimal fossa. A special concave metal guard (Fig. 2) protects the sac while affording support for the trephine (Fig. 4). This trephine has two advantages: (1) while perforating the lacrimal bone in an oscillatory motion, it will not damage the underlying nasal mucosa, and (2) with it, a disc of the bone can be removed in one piece, which eliminates the splinters caused by the use of hammer and chisels.

To facilitate recognition of the entire thickness of the wall of the lacrimal sac, 1 cc. of penicillin suspension may be injected through the canaliculus into the sac. The posterior wall is thereby distended, and the incision can then be readily made through its entire thickness. The canalic-

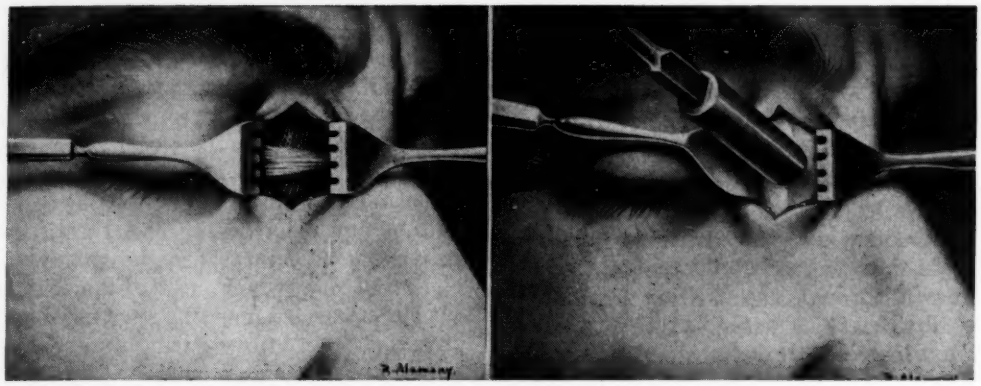

Fig. 3.—*Left*, incision held open by two retractors. ***Right***, trephine perforating the lacrimal bone.

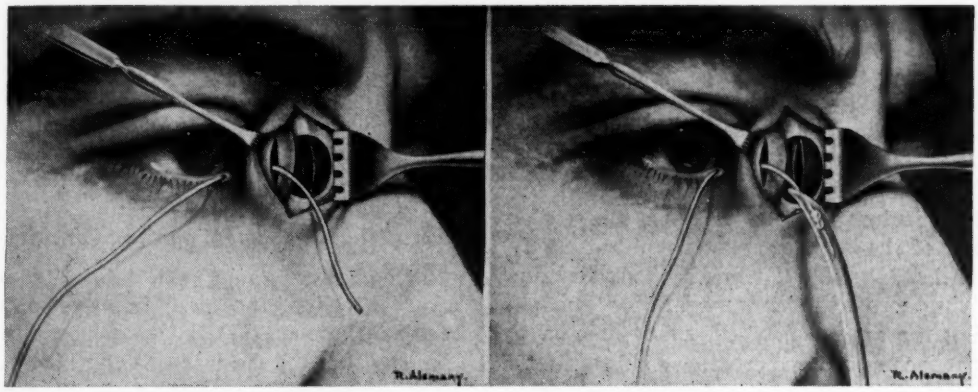

Fig. 4.—*Left*, lacrimal bone opening and small tubing through the canaliculus and lacrimal sac wall. *Right*, small tubing in large tubing with knot tied.

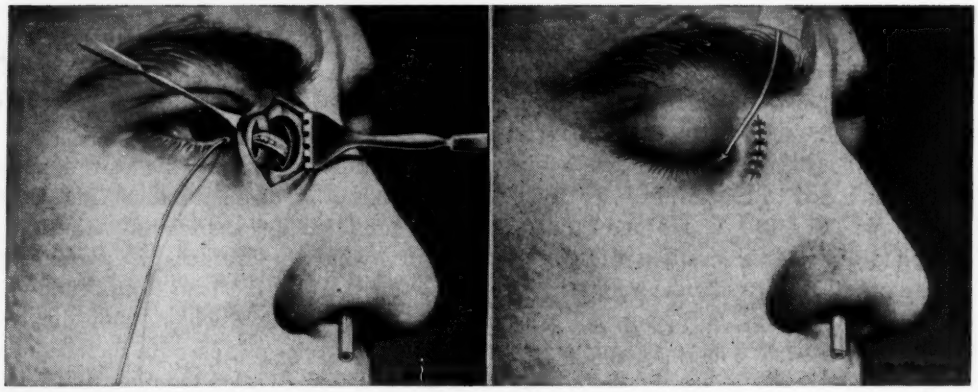

Fig. 5.—*Left*, large tubing entering nose through osseous perforation. ***Right***, sutures, with small tubing held in place.

ulus is probed to make sure that penetration of the lacrimal mucosa is complete. At times it is more practicable to buttonhole the posterior wall by grasping its surface with forceps and cutting it with concave scissors. The already exposed nasal mucosa is then incised with a knife.

Polyethylene tubing of small caliber (outer diameter, 0.61 mm.) is then introduced through the canaliculus and made to emerge through the incision of the sac wall (Fig. 5). This end of the tubing is then inserted through a small opening into a previously sealed end of large tubing (outer diameter, 5.95 mm.). The distal end of the small tube emerging from the open end of the large one is knotted (Figs. 1*C* and 6) to insure its being held in place. The open end of the large tube is now introduced through the perforation of the lacrimal bone into the nasal cavity (Fig. 7) and is made to emerge from the nose. The small tube is then pulled through the canaliculus; as this is done, the sealed end of the large tube enters the sac cavity (Figs. 1*D* and 7), while its body remains lying across the bony perforation, enhancing the approach of the nasal mucosa to the sac mucosa and creating a substantially large and permanent fistulization. This process makes optional the difficult performance of suturing the lips of the nasal mucosa to the corresponding ones of the lacrimal sac. The medial canthal ligament is next sutured with catgut to the periosteum above the anterior lacrimal crest. The skin section is closed with separate fine silk sutures, and the small tube is then anchored to the forehead with adhesive tape (Fig. 8). A pressure bandage is applied and left in position for five to seven days. The silk sutures are generally removed seven days after operation; the tubing itself is kept in place as long as possible, from fifteen to twenty days after the operation.

COMMENT AND CONCLUSIONS

The points of interest to remember in performing the operation are as follows: 1. Anesthesia must be perfect, because it is distressing to have the patient complain of pain during the operation. 2. The incision must be 2 to 3 mm. from the inner canthus and must be superficial until the underlying structures are recognized. 3. The nasal vein, which most of the time is flat and distended, must be recognized and protected from injury during the trephination by means of a retractor. Damage to the nasal vein results in hemorrhages, which make the operation difficult because of inability to recognize the tissues properly. 4. The medial palpebral ligament must be recognized and followed to its insertion. 5. The trephine must be prevented from injuring the medial wall of the sac and the surrounding tissues while in rotation, and the drilling should not be so far in as to tear the nasal mucosa. 6. The tubings employed must be properly adapted.

In conclusion, the main improvements in this technic are (1) in the approach to, and exposure of, the lacrimal sac; (2) in filling the sac with penicillin emulsion so that its distension will facilitate incision or buttonholing of this tissue (the emulsion also serves as a protective antibiotic medium; and (3) in the special use of the Iliff-Stryker saw, which does not traumatize the nasal mucosa and makes possible a clean incision.

The chief feature of this operation is the combination of fine tubing, which does not traumatize the canaliculus, with larger tubing, which guarantees a permanent large aperture in the bony wall. It is the latter, large obstacle which, while impeding the bony closure, permits the two mucosae to become sealed together and form a fistulization that is large and lasting.

This technic, furthermore, obviates the laborious and difficult suturing of the mucosae. Certainly this suturing is very provoking to all but the consummate technician. Besides, my experience in performing dacryocystorhinostomies for many years with the conventional technic has been that these sutures invariably slough off after a short time, causing the newly formed lacrimonasal passage to close. With the aforedescribed simplified approach, however, it has been gratifying to see rapid recoveries following the establishment of patency of the lacrimal apparatus, to the full satisfaction of the patient.

SUMMARY

A shortened, simplified procedure for dacryocystorhinostomy is described, the main feature of which is a unique application of two sizes of polyethylene tubing to create a permanent nasolacrimal fistula for the cure of epiphora: the small one through the canaliculus, the large one through the osseous opening of the lacrimal fossa, as illustrated in the drawings.

Other points of importance are the approach to, and exposure of, the lacrimal sac, and the use of the Iliff-Stryker saw to facilitate trephining.

RÉSUMÉ

Une technique simplifiée de dacryocystorhinostomie est décrite, dont la caractéristique essentielle est l'application unique de tubes de polyéthylène de deux dimensions différentes, afin de créer une fistule nasolacrymale permanente en cas d'épiphorée: le plus court est placé au travers des canalicules, le plus long au travers de la brèche osseuse de la fosse lacrymale, comme le montrent les dessins.

D'autres détails importants de cette technique sont la voie d'approche et la mise à nu du sac lacrymal, ainsi que l'utilisation de la scie d'Iliff-Stryker, qui facilite la trépanation.

RIASSUNTO

Viene descritto un metodo semplificato per la dacriocisto-rinostomia, che consiste nell'applicazione di tubi di polietilene per il drenaggio permanente naso-lacrimale; uno di essi, il più piccolo di calibro, passa attraverso il canalicolo, l'altro attraverso il foro osseo della fossa lacrimale.

Un altro punto importante è l'aggressione e la preparazione del sacco lacrimale e l'impiego della sega Iliff-Strycker per facilitare la trapanazione.

ZUSAMMENFASSUNG

Es wird ein verkürztes und vereinfachtes Verfahren zur Anlegung einer Fistel zwischen dem Tränensack und der Nasenhöhle beschrieben. Im wesentlichen kommt es bei der Operation auf die einzigartige Anwendung von plastischen Kathetern von zwei verschiedenen Kalibern an, mit deren Hilfe eine dauernde nasolacrimale Fistel zur Heilung des Tränenflusses gebildet wird. Das engere Rohr wird durch das Tränenkanälchen geleitet, das weitere durch die knöcherne Öffnung der Fossa lacrimalis, wie aus den beigefügten Zeichnungen ersichtlich ist.

Von Wichtigkeit sind ferner der Zugang zum Tränensack, dessen Freilegung und die Anwendung der Iliff-Strykerschen Säge zur Erleichterung des Trepanierens.

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What a sense of security in an old book that Time has criticized for us!

—Lowell

Orthopedic Surgery

Postoperative Wound Infections in Orthopedic Surgery

Evaluation of Prophylactic Antibiotics

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THE indiscriminate use of antibiotics during the past ten years has resulted in the development of highly resistant strains of pathogenic bacteria. Essential bacteria of the gastrointestinal tract have been destroyed. Diarrhea, ulcerative colitis and nutritional deficiencies have been reported to follow prolonged therapy with some antibiotics. The use of antibiotics before and for varying periods after "clean" operations has not always prevented surgical wound infections. We have become convinced that the "antibiotic umbrella" has many defects. The use of antibiotics prophylactically to try to prevent wound infections when operations were performed in areas where there was no known infection, past or present, has merely lulled the surgeon into a state of false security.

The occurrence of 8 major postoperative wound infections in six months, in this series from the orthopedic services at Chicago Wesley Memorial Hospital, has convinced us that surgeons should scrutinize carefully all postoperative wound infections that have followed "clean" major orthopedic operations during the past several years. The purpose of this paper is to report the results of our study, with an evaluation of antibiotic prophylaxis.

Material and Methods.—The data presented here were collected by a review of the records of 3,000 consecutive "clean" cases in which major orthopedic operations of various types were performed between January 1952 and June 1957 inclusive. Cases with inadequate postoperative records were not included in this study. The cases studied were those of private patients of seven senior attending orthopedic surgeons at Chicago Wesley Memorial Hospital.

Some of the orthopedic surgeons had used prophylactic antibiotics routinely; others had not used them at all. Thus the patients were divided into two comparable groups: Group A, those who were given prophylactic preoperative and/or postoperative antibiotics; and Group B, those who were not.

Only "clean" operations were included in this study. Cases of open fracture, cases in which infection was already present or there was reason to anticipate infection (for example, an "old septic hip" that had been quiescent for several years before the operation), and cases in which

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TABLE 1.—*Incidence of Major and Minor Postoperative Wound Infections*

Group	No. of Clean Cases	Total Infections	Per Cent	No. of Major Infections	Per Cent	No. of Minor Infections	Per Cent
A (had antibiotic prophylaxis)	1,900	112	5.9	36	1.89	76	4
B (no prophylactic therapy)	1,100	29	2.6	8	0.73	21	1.99

there were other indications for antibiotics, such as infection of the urinary tract or postoperative pulmonary complications, were excluded.

For our study, the infections were classified as major and minor. A *minor* infection is one that shows a trivial localized area of inflammation, such as a small stitch abscess or a localized inflammatory reaction in the skin margins. An infection is classified as *major* if it causes destruction of tissue, drainage of pus, systemic manifestations, a prolonged stay in the hospital for therapy, or infection of bone.

TABLE 2.—*Incidence of Major Infections as Related to the Region of the Body Operated Upon*

Region	Total No. of Cases	No. of Cases with Major Infections	Per Cent
Back: lumbosacral and sacroiliac	460	6	1.3
Spine: cervico-dorsolumbar	106	1	0.9
Hip	401	14	3 49
Thigh	160	1	0.6
Knee	316	3	0.9
Leg	178	4	2.26
Ankle	120	2	1.7
Foot	551	7	1.3
Neck	48	0	0
Shoulder: clavicle-scarula	108	2	1.9
Arm	91	0	0
Elbow	118	1	0.9
Forearm	128	1	0.8
Wrist	55	1	1.8
Hand	160	1	0.6

Special *study sheets* were compiled for each of the 3,000 cases, recording the age, sex, general condition and nutritional status of the patient; the presence or absence of foci of infection (draining ears, abscessed teeth, etc.) ; the preoperative white blood cell count and differential count; the type and duration of the operation; the date of operation; the names of the operating surgeon and his assistants; the region of the body operated upon; applications of plaster casts in the operating room; notes indicating whether antibiotics were administered prophylactically and, if so, the antibiotic or combination of antibiotics used and the dosage and duration of antibiotic therapy. Untoward reactions to antibiotics were recorded, and the cost of the antibiotics was calculated for each patient. If operative wound infection developed in the operative wound, the date on which such infection started was noted and the infection was recorded as major or minor. Each infection was followed to determine the end result.

Cultures were taken and the sensitivity of the organism to antibiotics was determined for each major infection. In the cases of a few patients blood gamma globulin determinations were made. The results of these were also recorded on the work sheets.

Results.—The results of this study were tabulated and checked for statistical validity.

Incidence of postoperative wound infections: We soon learned that the ratio between patients given prophylactic antibiotics and those given no antibiotics was approximately 19 to 11. We then decided to close the study when we had 1,900 work sheets in Group A and 1,100 in Group B, or a total of 3,000 cases.

The total number of major and minor wound infections was 141, or 4.7 per cent. Forty-four were major infections (1.47 per cent), and 97 (3.23 per cent) were minor infections.

Table 1 shows the rate for major and minor wound infections in each group. The incidence of major infections was 1.89 per cent, or 2.59 times as high in the prophylactic antibiotic Group A as in Group B. In Group B, consisting of patients who were not given antibiotics, the incidence of major infections was only 0.73 per cent.

The region of the body operated upon as related to the rate of infection is shown in Table 2. The highest incidence of infection was in operations about the hip (14 infections in 401 cases, or 3.49 per cent). The difficulty of draping a hip during an operation may be an important factor here.

The length of time required for the operative procedure has a direct relation to the incidence of postoperative wound infection. Table 3 shows the increase in number of infections with prolongation of operating time.

TABLE 3.—*Incidence of Major Postoperative Wound Infections as Related to Duration of Operative Procedure*

Operating Time, Minutes	*Total No. of Major Infections*	*No. of Infections in Group A (Antibiotic)*	*No. of Infections in Group B (No Antibiotic)*
15-60	1	1	0
61-120	6	6	0
121-180	17	15	2
181-and over	20	14	6
Total	44	36	8

With regard to *age and sex distribution*, 28 of the 44 major postoperative wound infections occurred in female patients. The youngest patient with a major infection was 3 months and the oldest 91 years of age.

Twenty-one of the 44 major infections occurred in patients more than 50 years old.

The rate of major infections as correlated with type of prophylactic antibiotic

TABLE 4.—*Rate of Infection as Correlated with Type of Prophylactic Antibiotic Used*

Antibiotic Used for Prophylaxis	*Total No. of Patients*	*Patients Infected*		*Patients with Major Infection*		*Patients with Minor Infection*	
		No.	*Per Cent*	*No.*	*Per Cent*	*No.*	*Per Cent*
Penicillin	302	40	13.2	14	4.6	26	8.6
Penicillin & Streptomycin	652	52	8	18	2.8	34	5.5
Erythromycin	360	11	3	1	0.3	10	3
Iliotycin & Sulfa	470	3	0.6	2	0.4	1	0.2
Achromycin-Terramycin-Aureomycin	216	6	2.8	1	0.5	5	2.3
Total	1,900	112	5.9	36	1.89	76	4

TABLE 5.—*Untoward Reactions to Antibiotics*

Antibiotic Administered	*Total No. of Patients Given the Antibiotic*	*No. of Patients with Untoward Reactions*	*Untoward Reactions Observed*
Penicillin	302+652=954	34 (3.6%)	Cutaneous and oral
Streptomycin (with penicillin)	652	4 (0.6%)	Eighth nerve hearing depressed
Erythromycin	360	6 (1.7%)	Gastrointestinal (3 patients) Cutaneous (1 patient)
Ilotycin and sulfa	470	4 (0.9%)	Gastrointestinal (3 patients) Cutaneous (2 patients)
Achromycin-Terramycin-Aureomycin	216	19 (4.2%)	Gastrointestinal Bacteriologic effects, as in female genitalia, bowel, etc.

TABLE 6.—*Bacterial Flora in Major Wound Infections**

Organism Cultured	*No. of Cases*	*Per Cent*
Micrococcus pyogenes aureus (coagulase-positive)	24	54.5
Micrococcus pyogenes albus (coagulase-positive)	15	34.1
Proteus vulgaris	1	2.2
Pseudomonas aeroginosa	3	6.8
Bacillus subtilis**	1	2.2

*Total number of major wound infections, 44.
**Contaminant? Anerobic culture studies not done in this case.

TABLE 7.—*Penicillin Sensitivity Studies of Staphylococcus Aureus and Albus Recovered from Thirty-Nine Major Wound Infections*

Datum	*No. of Cases*	*Per Cent*
Penicillin-resistant staphylococcus	35	89.7
Penicillin-sensitive staphylococcus	4	11.3

used is shown in Table 4. The superior prophylactic value of erythromycin, ilotycin with sulfa, and the combination of achromycin, terramycin, and aureomycin is evident.

Untoward reactions to antibiotics are recorded in Table 5. In 67 of the 1,900 patients (3.6 per cent) who were given antibiotics, untoward reactions of one type or another developed. There are possible sources of error in these figures, as other medicaments were also given at that time. On discontinuance of the antibiotics, however, the reactions subsided.

The cost of antibiotics to 1,900 patients totaled about $34,140, or approximately $18 per patient.

The bacterial flora of the postoperative major wound infections and the *results of the sensitivity studies* are shown in Tables 6 and 7. Note that the most common causative organisms are Micrococcus pyogenes aureus and albus (88.6 per cent). Sensitivity studies show that 89.7 per cent of the staphylococci were penicillin-resistant.

As to the end result of postoperative wound infections, in Group B (no antibiotic prophylaxis) the total number of major wound infections was 8. Six of them were treated successfully, by the appropriate antibiotic therapy and surgical drainage, within three to six days after the detection of infection.

Two patients were treated by sequestrectomy and débridement of the infected wounds, after which they healed satisfactorily.

In Group A (antibiotic prophylactic group) the total number of major wound infections was 36. The follow-up in these cases disclosed 1 death; 1 patient with amputation below the knee; 2 still in the hospital and seriously ill, and 4 with wounds still draining despite repeated operative procedures to treat the infection. Seven infections healed after two operations, and 8 healed after one operation. Fourteen patients were treated successfully by effective antibiotics while in the hospital.

The following cases show some of the dangers of the prophylactic or indiscriminate use of antibiotics:

CASE 1.—A 64-year-old white woman underwent patellectomy and débridement of the right knee for degenerative arthritis. Preoperatively her general condition was good and she had no gastrointestinal complaints. Postoperatively she was given prophylactic oxytetracycline, 250 mg. every six hours. On the fifth postoperative day, severe diarrhea developed, with gross blood in the stools. Oxytetracycline was discontinued and erythromycin administered (250 mg. every six hours). Cultures of the stool revealed Micrococcus pyogenes aureus (Staphylococcus aureus), hemolytic and coagulase-positive. Sensitivity studies revealed sensitivity to erythromycin. Within a few days the diarrhea was controlled. The operative wound healed *per primam*.

Comment: This was a case of severe staphylococcic pseudomembranous enterocolitis that came on five days after the operation, during oxytetracycline therapy. This was a secondary or superimposed infection. We have observed this complication in 19 patients who were given prophylactic chlortetracycline, oxytetracycline or tetracycline and in 6 patients who were given erythromycin combined with sulfa.

CASE 2.—A white man 20 years old suffered a transverse closed fracture of the middle third of the shaft of the right femur. Open reduction was carried out, and internal fixation was maintained by means of an intramedullary rod. The patient was treated postoperatively with prophylactic penicillin and erythromycin combined with sulfa. His postoperative course was smooth. He was afebrile, and the operative wound was healing *per primam*. On the tenth postoperative day the antibiotics were discontinued. On the twelfth postoperative day there was elevation of temperature, and local signs of infection were present in the operative wound. Pus began to drain from the wound on the fourteenth day. The cultures were positive for Micrococcus pyrogenes var. aureus. The organisms were hemolytic and coagulase-positive. They were sensitive to achromycin, terramycin, aureomycin and chloramphenicol. The infection was controlled by acromycin, and, after draining for days, the wound healed.

Comment: This case illustrates a masked infection that developed during prophylactic antibiotic therapy. The surgeon was unaware of its existence because of the absence of fever and local signs of inflammation. The infection was resistant to antibiotics administered prophylactically. There were 17 masked infections in our series. In 6 of these the infection extended to bone.

CASE 3.—A 67-year-old white woman suffered an intertrochanteric fracture of the left hip. Two days later, open reduction was carried out and internal fixation was maintained by means of a McLaughlin nail and plate. There was no break in sterile technic. The postoperative course was uneventful until the sixth postoperative day, when fever developed and there was drainage of pus from the operative wound. Cultures were taken to identify the organism, and sensitivity studies were made. Erythromycin 250 mg. every six hours was given. In three days the infection was controlled. The organism was Staphlycoccus aureus, coagulase-positive.

Comment: This case shows the wisdom of withholding antibiotic therapy until

signs of infection develop. The infection is easier to treat, as the causative organism is more likely to be sensitive to the safer use of antibiotics than are the organisms that produce infection while antibiotics are being administered prophylactically.

GENERAL COMMENT

Several articles have appeared in the recent medical literature about postoperative wound infections and prophylactic antibiotic therapy.[1] Serious problems are created by the indiscriminate use of prophylactic antibiotics. These include reactions because of the toxicity of the antibiotics, sensitization of an increasing number of patients and the development of resistant strains of bacteria. An increase in the percentage of penicillin-resistant strains of staphylococci has been correlated with the dosage and duration of antibiotic therapy. Penicillin resistance might be due to production of penicillinase at the site of local infection, which renders penicillin inert; or perhaps new strains of the organism are mutated, which are not susceptible to penicillin. The development of masked infections during prophylactic therapy may be serious. Local signs of inflammation and constitutional symptoms are absent, and the surgeon may be unable to detect the presence of infection. The infection may spread and involve bone, with resultant osteomyelitis and the formation of sequestra, necessitating repeated operative procedures.

The emergence of virulent strains of organisms hitherto not strongly pathogenic has resulted in superinfections within the wound or elsewhere in the body, thus creating a serious complication. A false sense of security on the part of the surgeon, allergic reactions, and the expense involved are other disadvantages of the use of antibiotics in prophylaxis.

Our study discloses that the incidence of major and minor wound infections is higher in the patients who were treated prophylactically with antibiotics than in those who were not. This evidence casts doubt on the efficacy and the wisdom of such therapy in "clean" operations.

Six of the 8 patients in Group B (patients who were not given prophylactic antibiotics) in whom major infections developed were effectively treated with antibiotics in three to six days. The organisms cultured in these cases were sensitive to most of the antibiotics. The importance of restricting the use of antibiotics to the treatment of established infection is shown by these observations.

Reid[2] urged every operating surgeon to work with a mind acutely conscious of the principles of wound healing. Bacteria are the immediate cause of infection, but all "clean" surgical wounds are contaminated by airborne micro-organisms. Experience has shown that, of two surgeons who perform similar operations with the same possibilities of bacterial contamination, one will encounter many more wound infections than will the other. The explanation is usually to be found in a study of the surgical technics of the two surgeons. The careless surgeon prepares the soil for the growth of bacteria by needless traumatization of tissues, interference with blood supply and production of tissue necrosis. Adherence to the following basic surgical principles will reduce operative wound infections to a minimum:

1. The greatest possible emphasis placed by each member of the surgical team on observing careful asepsis before and throughout the operation.

2. Placing of the incision in the position of optimum circulation.

3. Gentle retraction and handling of the tissues.

4. Careful tying of sutures so as to interfere as little as possible with circulation.

5. Tying of blood vessels before division, and removal of projecting ends beyond division.

6. Use of clamps to grasp the bleeding vessel only, and limitation of the number of clamps to the minimum.

7. Excision of all obviously non-viable tissue.

8. Sharp dissection with the knife when this does not endanger important nerves or blood vessels.

9. Before closing a wound, making sure it is free of bleeding, hematomas and dead spaces.

10. Protection of exposed areas of the wound not within the immediate field of work.

The perfection of surgical technic and strict observance of aseptic rules in the operating room will do more to lessen the incidence of postoperative infections than will the routine use of antibiotics. This study indicates that postoperative antibiotics should be used only if there has been a break in sterile technic, if there is reason to anticipate infection or if infection is already definitely present.

SUMMARY AND CONCLUSIONS

In a consecutive series of 3,000 "clean" major orthopedic operations, postoperative wound infections developed in 141 cases (4.7 per cent). Forty-four of the infections were major (1.47 per cent) and 97 were minor (3.23 per cent).

The incidence of major infections was 2.59 times more in Group A (1.89 per cent) than in Group B (0.73 per cent). Group A consisted of 1,900 cases in which the patients were routinely treated prophylactically with various antibiotics. Group B consisted of 1,100 in which the patient was not given any prophylactic antibiotics either preoperatively or postoperatively.

The bacteria most commonly cultured from the wounds were Micrococcus pyogenes aureus and albus, 89.7 per cent of which were not sensitive to penicillin.

Of the 8 major infections in Group B, 6 were successfully treated with antibiotics.

The disadvantages of prophylactic antibiotics are discussed. The various factors contributing to and safeguarding against the development of postoperative wound infections are presented. The importance of careful handling of the tissues and acute consciousness of the principles of aseptic technic and wound healing is stressed.

Conclusion.—The routine use of postoperative antibiotics as a prophylactic measure is unwise.

RÉSUMÉ ET CONCLUSIONS

Dans une série consécutive de 3.000 opérations orthopédiques majeures aseptiques, les auteurs ont eu 141 cas (4,7%) d'infections, dont 44 (1,47%) graves et 97 (3,23%) bénignes.

La fréquence des infections graves a été 2,59 fois plus grande dans le Groupe A (1,89%) que dans le Groupe B (0,73%). Le Groupe A comprenait 1.900 cas traités prophylactiquement aux antibiotiques. Les 1.100 cas du Groupe B n'ont reçu aucun antibiotique, ni pré- ni post-opératoirement.

Les bactéries les plus fréquentes ont été le microcoque pyogène aureus et albus (89,7% insensibles à la pénicilline).

Sur les 8 infections graves du Groupe B, 6 ont été traitées avec succès aux antibiotiques.

Les désavantages de la prophylaxie antibiotique sont discutés. Les divers facteurs contribuant à la défense contre l'infection

post-opératoire des plaies opératoires sont analysés. L'importance d'une manipulation délicate des tissus et de la stricte observation des principes d'une technique aseptique est soulignée.

RIASSUNTO

Su 3.000 interventi ortopedici d'elezione si ebbero 141 casi (4,7%) di infezione delle ferite; di queste, 44 furono gravi (1,47%) e 97 lievi (3,23%).

L'incidenza delle infezioni gravi fu 2,59 volte più alta nel gruppo A (1,89%) che nel gruppo B (0,13%). Il gruppo A era costituito da 1.900 casi in cui era stata praticata, come regola abituale, la profilassi mediante antibiotici di natura varia; il gruppo B, invece, era costiuito di 1.100 casi cui tale profilassi non era stata eseguita nè prima nè dopo l'intervento.

I germi più comunemente coltivati furono il micrococco piogeno aureo ed albo, l'89,7% dei quali erano penicillino-resistenti.

Degli 8 casi di gravi infezioni del gruppo B, 6 furono curati con successo mediante antibiotici.

Vengono discussi gli svantaggi della profilassi con antibiotici e presentati i vari fattori che contribuiscono, o che invece evitano, lo sviluppo dell'infezione delle ferite chirurgiche. Si insiste soprattutto sull'importanza di seguire con esattezza le regole dell'asepsi e quelle del delicato trattamento dei tessuti.

ZUSAMMENFASSUNG UND SCHLUSSFOLGERUNGEN

In einer ununterbrochenen Reihe von 3000 sogenannten "sauberen" grösseren orthopädischen Operationen kam es in 141 Fällen (4,7 Prozent) zu postoperativen Wundinfektionen. In 44 Fällen (1,47 Prozent) handelte es sich um schwerere Infektionen, in Fällen (3,23 Prozent) um leichtere.

Die Häufigkeit grösserer Infektionen war in der Gruppe A (1,89 Prozent) 2,59 mal so hoch wie in Gruppe B (0,73 Prozent). Die Gruppe A bestand aus 1900 Fällen, die routinemässig mit verschiedenen Antibiotika prophylaktisch behandelt worden waren. Gruppe B bestand aus 1100 Fällen, in denen weder vor noch nach der Operation Antibiotika prophylaktisch angewandt wurden.

Die am häufigsten aus den Wunden mittels Kultur gewonnenen Bakterien waren Micrococcus pyogenes aureus und albus, von denen 89,7 Prozent nicht penizillinempfindlich waren.

Von den acht schwereren Infektionen aus Gruppe B wurden sechs erfolgreich mit Antibiotika behandelt.

Die Nachteile prophylaktischer Behandlung mit Antibiotika werden erörtert. Die verschiedenen Faktoren, die zur Entwicklung und zur Verhütung postoperativer Wundinfektionen beitragen, werden dargestellt. Die Wichtigkeit vorsichtiger Behandlung des Gewebes und der Beobachtung der Grundsätze aseptischer Technik und der Wundheilung wird hervorgehoben.

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The art of pleasing consists in being pleased. To be amiable is to be satisfied with one's self and others.

—Hazlitt

Men trust to their eyes, rather than to their ears; the effect of percepts is, therefore, slow and tedious, while that of examples is summary and effectual.

—Seneca

The maxim "In vino veritas"—that a man who is well warmed with wine will speak the truth—may be an argument for drinking, if you suppose men is general to be liars; but, sir, I would not keep company with a fellow who lies as long as he is sober, and whom you must make drunk before you can get a word of truth out of him."

—Johnson

The premature wisdom of youth resembles the forced fruit of our hothouses: it looks like the natural production, but has not its flavor or raciness.

—Blessington

The best that history has to give us is the enthusiasm which it arouses.

—Goethe

Every man is a volume, if you know how to read him.

—Channing

Management of Fractures of the Jaws in Children

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FRACTURES of children's jaws are much rarer than are fractures of the jaws of adults.** They have great significance, however, owing to the problems of therapy that are peculiar to children and the serious deformities consequent to poor treatment.

The literature on treatment of fractures of the jaws of children is scanty. Textbooks ignore the subject. Most authors, however, favor *radical* procedures, i.e., the Roger Anderson pin technic and its variations, open reduction by means of bars and screws, wiring and the blind use of Kirschner's wires.[1]

Conservative measures, such as circumferential wiring or intermaxillary wiring, are ignored, presumably on the basis of technical difficulties in dealing with children.

In my own opinion the radical method is convenient and quick but yields poor long-term results. Facial deformities, bifid face, micrognathism and malocclusion frequently follow its use. These occur as a result of interference with growth centers, secondary to the superimposition of surgical trauma on the original injury.

The radical procedure is also attended with the risk of osteomyelitis, osteitis, intra-oral or extra-oral fistula, trigeminal neuralgia and loss of permanent teeth.

In conclusion, it may be added that most of the radical procedures are terminated by conservative measures, such as wiring, which might have sufficed alone.

My limited experience has created a personal philosophy and orientation with regard to the treatment of such fractures. My method is conservative and embodies four general principles:

1. The oral and facial structures are living tissues capable of growth. This growth potential has already been endangered by the initial trauma. Further

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**Of 1,500 cases of fractures of jaws treated in our department between 1941 and 1949, only 22 occurred in children, that is about 1.4 per cent.

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Fig. 1.—Girl 6 years old. During delivery the use of forceps produced injury and fracture of the left ramus of the mandible. No proper diagnosis was made and no treatment was given at the time. The result was pathologic asymmetry of the face and atrophy of the left side of the mandible (*a*). Photographs *a* and *b* show the first stage of repair and the correct relations.

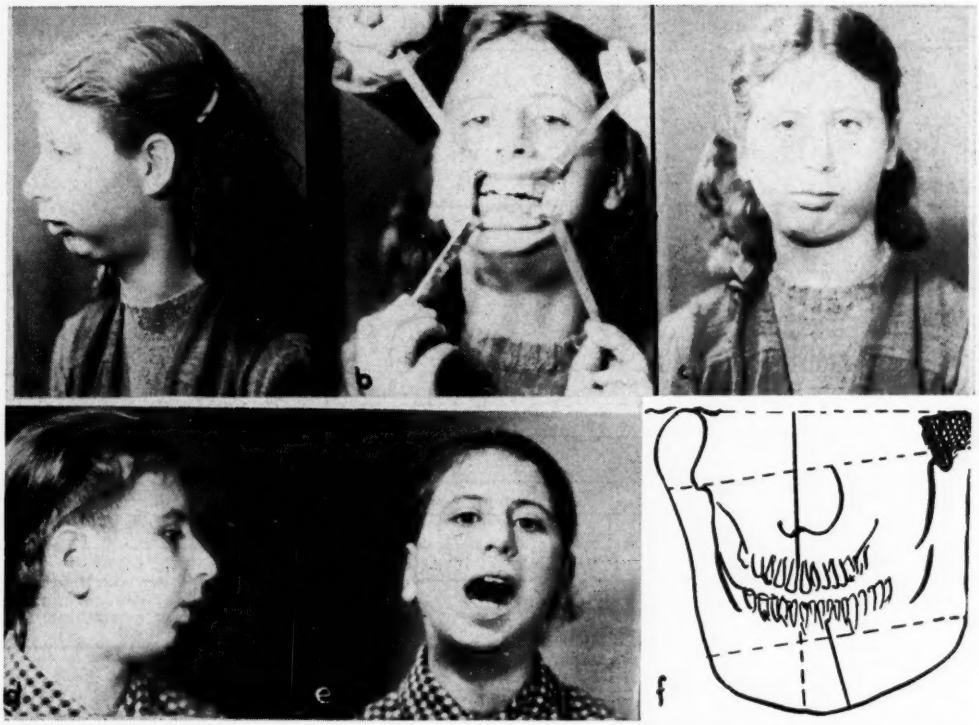


Fig. 2.—Girl 9 years old with micrognathism, ankylosis of the temporomandibular joint, and pathologic asymmetry of the face, the result of neglected fracture of condyloid process which occurred when she was 4 years old. Fig. *e*, reveals the surgical treatment of the ankylosis.

Fig. 3.—*Above*, diagram showing (*a*) twin arches, (*b*) orthodontic rubber bands of two different sizes and (*c*) arches and rubber bands in place after immobilization.

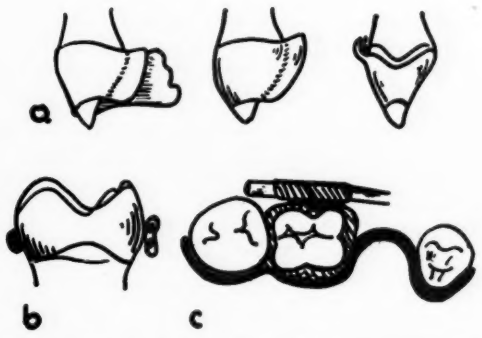


Fig. 4.—Diagram showing (*a*) preparation of metallic bands for anterior teeth and (*b*) and (*c*) bands for molar teeth, similar to the orthodontic ones.

TABLE 1.—*Varied Dietary Schedule for Normal Child 7 to 9 Years of Age*

Breakfast	Measure	Calories	Protein, Gr.	Calcium, Mg.	Iron, Mg.	Vitamin A, I.U.	Thiamin, Mcg.	Riboflavin, Mcg.	Niacin, Mg.	Ascorbic Acid, Mg.	Vitamin D, I.U.
Orange juice, fresh	3¼ oz.	44	0.8	19	0.2	190	80	30	0.2	49	—
Wheaties	1 cup	105	2.9	7	1.3	—	150	40	0.5	—	—
Toast	1 slice	63	2	18	0.4	—	60	40	0.5	—	—
Butter	1 pat	72	0.1	2	—	330	—	—	—	—	—
Scrambled eggs	1	120	6.6	44	1.3	726	56	165	—	—	31
Milk	8 oz.	166	8.5	288	0.2	390	90	420	0.3	3	5
Sugar	1 tsp.	16	—	—	—	—	—	—	—	—	—
Lunch											
Vegetable soup	1 serving	86	7.2	—	—	—	—	—	—	—	—
Crackers	2 sqs.	34	0.8	2	0.2	—	—	—	—	—	—
Am. cheese sandwich	1 average	239	11.1	242	0.7	400	70	160	0.5	—	—
Baked apple	1 large	213	0.6	12	16	180	40	45	0.3	2	—
Milk	8 oz.	166	8.5	288	0.2	390	90	420	0.3	3	5
Dinner											
Meat loaf	1 slice	264	10.4	26	1.7	50	118	111	2	—	2
Mashed potatoes	½ cup	123	2.1	27	0.6	260	80	50	0.8	7	—
Peas	½ cup	56	3.8	18	1.5	575	200	110	1.9	12	—
Tomato salad	1 small	20	1	11	.6	1,100	60	40	0.5	23	—
Baked custard	1 serving	205	8.8	163	1.1	607	82	315	0.1	—	22
Bread	1 slice	63	2	18	0.4	—	60	40	0.5	—	—
Butter	1 pat	72	0.1	2	—	330	—	—	—	—	—
Milk	8 oz.	166	8.5	288	0.2	390	90	420	3	3	5
After School											
Milk	8 oz.	166	8.5	288	0.2	390	90	420	0.3	3	5
Banana	1 small	88	1.2	8	0.6	430	40	50	0.7	10	—
		2,547	95.5	1,771	12.0	6,738	1,456	2,876	10.7	115	75

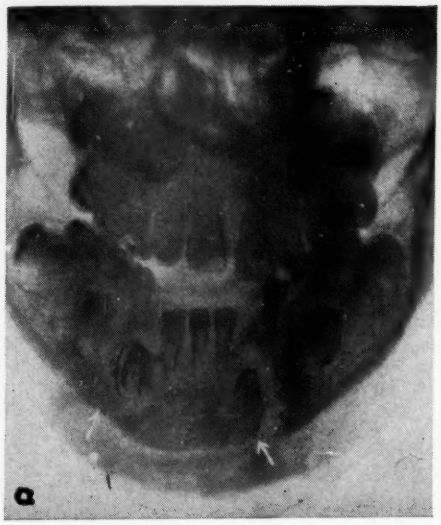
trauma is to be avoided.

2. A simple appliance is more easily tolerated than is an elaborate one and produces better results.

3. The surgeon should be completely orientated as to the type and degree of the injury by clinical, roentgen and laminographic examination.

4. The fracture should be reduced as early as possible, or the fragments placed in the best possible alignment pending final reduction.

Intermaxillary wiring has been used in most of my cases, regardless of the pa-



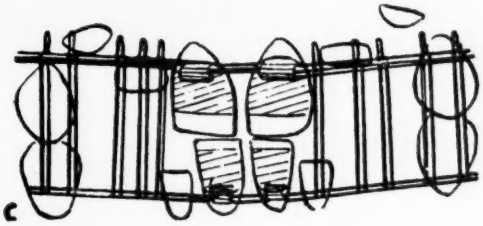


Fig. 5.—Child 6 years old with bilateral fracture of the mental symphisis, showing (*a*) roentgen appearance, (*b*) appearance after fixation and (*c*) diagram showing intraoral immobilization.

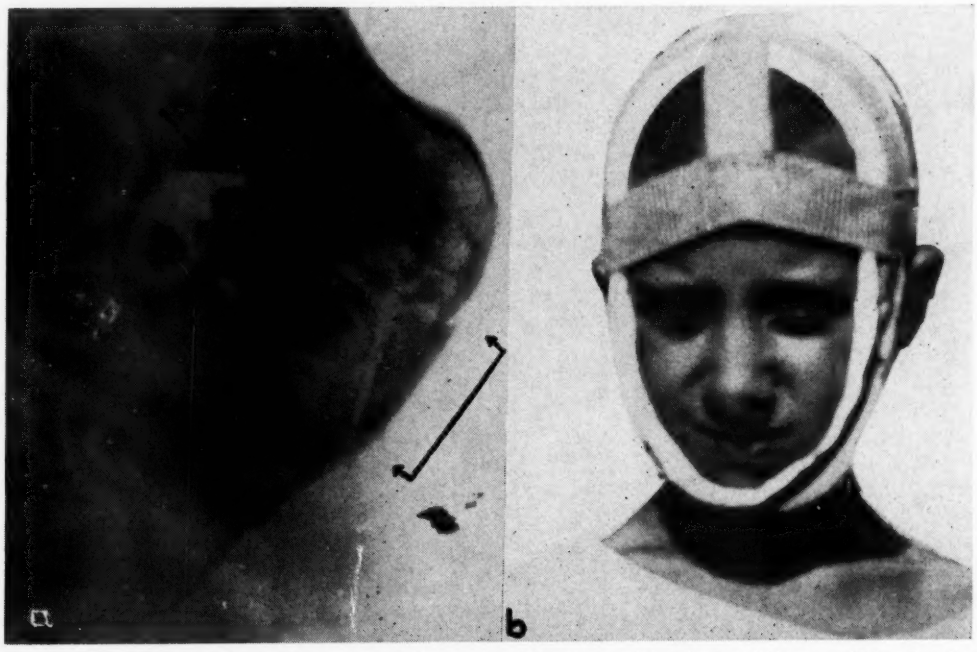


Fig. 6.—Boy 5 years old with comminuted compound fracture of the body of the mandible, showing (*a*) roentgen appearance and (*b*) extra-oral elastic help for the intra-oral fixation.

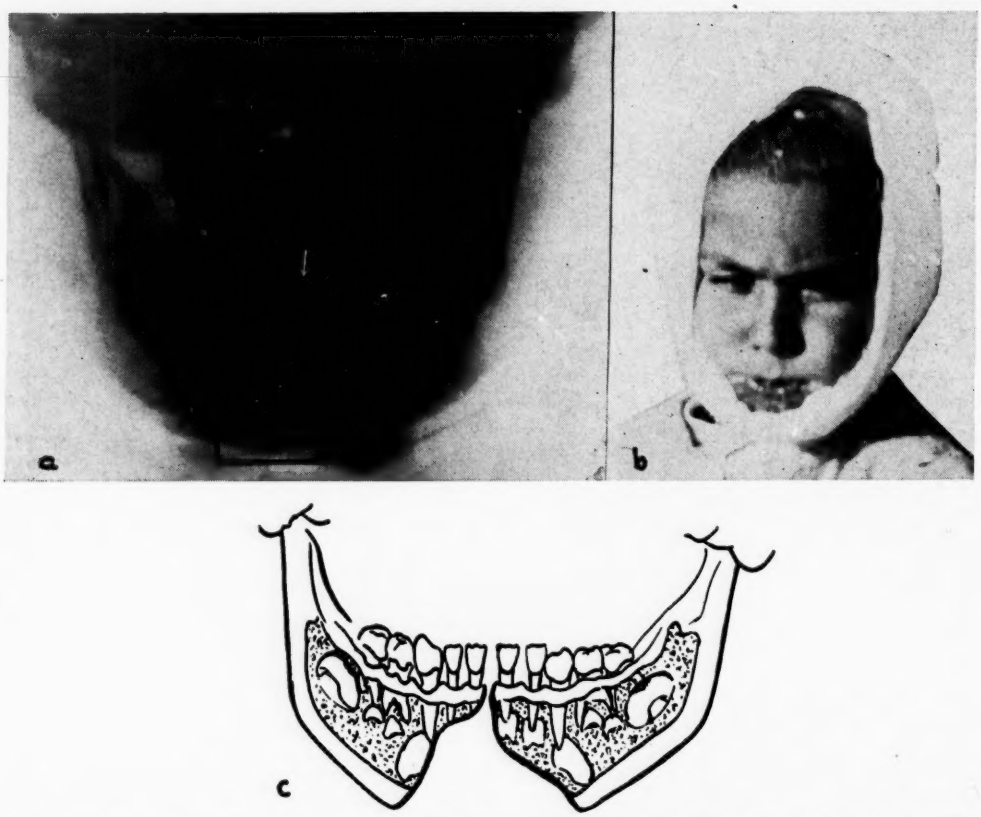


Fig. 7.—Boy 4 years old who suffered a comminuted compound fracture of mental symphysis with absence of bone tissue as the result of a gunshot injury. Immobilization by same intra-oral reduction method was satisfactory.

tient's age. Circumferential wiring with intra-oral splints is used when the teeth have not erupted.[2] Head, chin caps and bandages are used extra-orally, when indicated. When it has not been feasible to utilize the aforementioned technics, we have resorted to the following original method:

1. The best possible alignment is maintained preoperatively. This is difficult because of the antagonism of muscle forces to alignment, but is necessary because rapid callus formation in malalignment may produce pseudoarthrosis and will make reduction more difficult.

2. An appliance is constructed from prepared models of the jaws. The taking of impressions is difficult because of edema, trismus, irregular dislocation and lack of cooperation on the part of the child. The procedure can be facilitated by sedation or local anesthesia.

Sten's material or a similar one is used for impressions. Plaster of paris, if aspirated, may obstruct the airway or the esophagus. The impression trays have low palatal and lingual walls, for the primary objective is a good impression of the teeth, not the alveolar process. When necessary, partial impressions are taken in lieu of full impressions.

TABLE 2.—*Varied Basic Dietary Schedule for Child with Fracture, Aged 7 to 9 Years*

Breakfast	Measure	Calories	Protein, Gr.	Calcium, Mg.	Iron, Mg.	Vitamin A, I.U.	Thiamin, Mcg.	Riboflavin, Mcg.	Niacin, Mg.	Ascorbic Acid, Mg.	Vitamin D, I.U.
Tomato juice	6 oz.	42	2	14	0.8	2,100	100	60	1.6	32	—
Malt-O-Meal	¾ cup	102	2.7	—	1.3	—	200	79	0.7	—	—
Cream	7 tbsp.	204	2.9	97	0.1	830	30	140	0.1	1	15
Sugar	1 tbsp.	31	—	—	—	—	—	—	—	—	—
Milk	8 oz.	166	8.5	288	0.2	390	90	420	0.3	3	5
Midmorning											
Milk	8 oz.	166	8.5	288	0.2	390	90	420	0.3	3	5
Egg	1	77	6.1	26	1.3	550	40	130	—	—	27
Sugar	1 tsp.	31	—	—	—	—	—	—	—	—	—
Skim milk powder	2 tbsp.	56	5.4	196	—	—	60	300	0.2	2	—
Vanilla	1 tsp.	—	—	—	—	—	—	—	—	—	—
Noon											
Cream of pea soup	1 serving	102	6.2	—	—	—	—	—	—	—	—
Grapefruit juice	6 oz.	104	1.0	16	0.6	—	60	40	0.4	70	—
Milk	8 oz.	166	8.5	288	0.2	390	90	420	0.3	3	5
Midafternoon											
Orange juice	6 oz.	81	1.5	35	0.4	352	148	56	0.4	91	—
Supper											
Strained baby soup	1 can	66	3.3	21	1.0	6,350	65	55	0.7	3	—
Milk	8 oz.	166	8.5	288	0.2	390	90	420	0.3	3	5
Blended juices	6 oz.	80	1.2	18	0.6	80	100	40	0.4	76	—
Bedtime											
Milk	6 oz.	124	6.4	216	0.2	293	73	311	0.2	2	4
Egg	1	77	6.1	26	1.3	550	40	30	—	—	27
Ice cream	1/6 of qt.	197	3.8	117	0.1	494	38	181	0.1	1	—
Skim milk powder	2 tbsp.	56	5.4	196	—	—	60	300	0.2	2	—
Sugar	1 tsp.	31	—	—	—	—	—	—	—	—	—
		2,125	88	2,130	8.5	13,159	1,374	3,512	6.2	292	93

Anatomic orthodontic bands with lingual bars are constructed and adapted for the fixation of approximating teeth. Bands are never applied to carious or loose teeth or in the presence of gingivitis. Where teeth are missing, the bar acts as a space maintainer. The preparation of the bands of the anterior teeth in addition entails a curve formed on the cervical, labial or buccal margin and shaped like a horizontal

half-tube. Through this tube pass the twin arches; thus other complicated forms of fixation of these arches are omitted.

Twin arches are used in this technic because of this dual strength yet individual delicacy for easy manipulation. One arch gives rise to the points of fixation, the other adds strength.

3. Actual reduction of the fracture is guided mainly by the occlusion. Immobilization follows application of the bands. These are cemented in the usual fashion. The arches are applied to these, and fixation between the arches is achieved by elastic force (orthodontic rubber bands). The whole procedure is best done with the patient under local or general anesthesia.[3]

The problem of anesthesia has special points for consideration:[4]

1. General anesthesia is preferred, because of its freedom from psychic trauma.

2. Local anesthesia in a child under 9 years old is fruitless because of fear, hys-

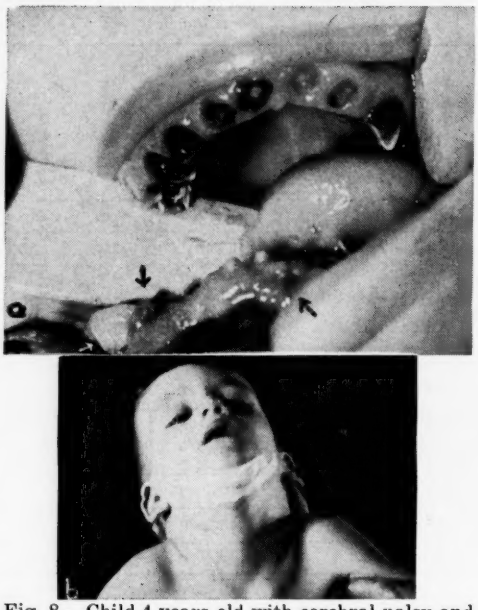


Fig. 8.—Child 4 years old with cerebral palsy and dentinogenesis imperfecta, who suffered a mandibular fracture after a fall, showing (*a*) oral condition and lines of fractures and (*b*) patient after reduction by circumferential wiring method and an acrylic splint.

Fig. 9.—Roentgenograms showing results of circumferential wiring method in child with cerebral palsy (fig. 7).

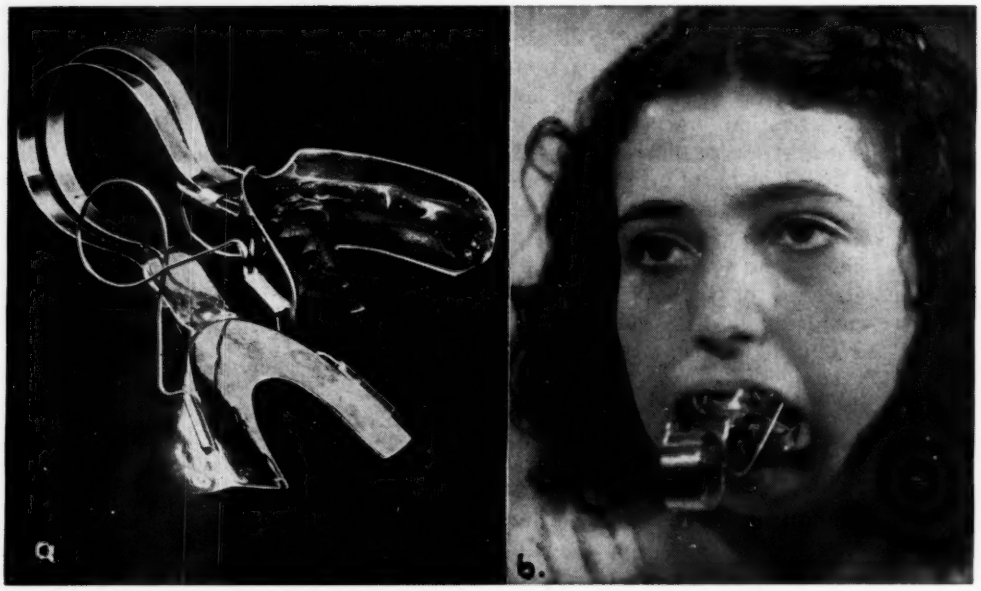


Fig. 10.—Appliance used by author as exerciser for postoperative physical therapy of trismus; (*a*) Pan's exerciser and (*b*) the appliance in use by a young patient for this purpose.

teria, inability to comprehend and total lack of cooperation.

3. For general anesthesia, the systemic condition of the child must be good. Debilitation, shock, etc., are contraindications.

4. Later nausea due to fixation of the mandible to the maxilla is to be avoided. This fixation can be instantly broken by severing the rubber bands. Tracheotomy should be used freely when necessary.

Postoperative treatment too has its special problems, including those of immediate postoperative care, with careful observation for aspiration and shock. A recovery room environment is most helpful. Oxygen should be freely employed. The patient should also be watched for extreme restlessness, as muscular activity could loosen the fixation.

The intermediate postoperative period, or the time during which fixation is used, is marked by nutritional and varied systemic upsets. All of these contribute to local deterioration of the gums and teeth. Observation and careful oral hygiene will take care of the latter. Care in feeding, nutrition, encouragement and supervised activity will minimize the former. Sodium perborate mouthwash is particularly good for cleaning the mouth and leaves a taste that is pleasant to the little patient.

The final or postfixation period has problems related to trismus. Most trismus passes spontaneously after a few days. Obstinate trismus responds well to the spring-powered exerciser I use. The advantages of this exerciser are as follows:

1. It is easy to apply even in cases of the severest type; the basic plates are no more than 3 mm. thick.

2. Continuous mild action, variable and controllable from 125 mg. to 1 Kg. of continuous force, is exerted.

3. Application of the force to all teeth is equal. Injuries are minimized.

4. Lateral movements of the mandible are preserved.[5]

One final point: Nutritional disturbances are pronounced and must be considered. They become apparent as early as the second day after the operation and last through the fixation period. Loss of weight and debility were increased in this series of cases. The basic problem is loss of appetite, caused by the permissible diet, as well as the problem of mechanical ingestion. This occurs at a time of increased body need for the nutrients necessary for rapid healing. A deficiency is manifested immediately by prolongation if not actual complication of the injury. A high protein diet must then be given (2 to 3 Gm. per kilogram of body weight) and complete with essential fatty acids, vitamins and minerals. A guide to specific values can be obtained from the Food and Nutrition Boards, 1949 Research Council.[6]

In a limited essay of this kind I cannot exhaust all the questions and all other aspects of my topic, but my purpose here is to emphasize the fact that the surgeon who attempts to manage fractures in children is faced with problems he does not encounter in adults. He must always be aware of the fact that the facial bones are growing and that malformations and permanent deformities of the developing facial structures may result from interference with normal growth. He must also consider the technical difficulties involved in reduction of small structures. Above all, he must approach the treatment of the fearful, perhaps hysterical, child with sympathy and understanding.

ZUSAMMENFASSUNG

Der Verfasser weist darauf hin, dass der Chirurg in der Behandlung von Knochenbrüchen von Kindern Problemen gegenüber steht, die bei Erwachsenen nicht in Frage kommen. Die Gesichtsknochen des Kindes befinden sich im Stadium des Wachstums, und eine Störung des normalen Entwicklungsganges kann zu dauernden Entstellungen des Gesichtes führen. Dazu kommen technische Schwierigkeiten bei der Einrichtung kleiner Knochengebilde. Vor allem aber darf der Chirurg nicht vergessen, dass die Behandlung eines ängstlichen und vielleicht hysterischen Kindes mit Verständnis und Mitgefühl erfolgen muss.

RIASSUNTO

L'autore mette in luce il fatto che il chirurgo che debba trattare fratture nei bambini si trova ad affrontare problemi che non esistono nell'adulto. Per esempio deve essere consapevole del fatto che le ossa facciali crescono e che qualunque fatto interferisca con il processo di sviluppo può determinare deformità permanenti. Deve anche considerare le difficoltà tecniche che si possono incontrare nella riduzione di fratture di ossa molto piccole. Soprattutto, infine, deve affrontare il problema di curare, con simpatia e comprensione, un bambino terrorizzato e a volte isterico.

RESUMEN

El autor llama la atención sobre el hecho de que el cirujano que trata fracturas de niños se enfrenta con problemas que no suelen aparecer en el caso de adultos. Debe siempre darse cuenta del hecho de que los huesos de la cara están en período de crecimiento, y que en consecuencia pueden producirse deformaciones permanentes que cambien las características faciales al interferir con las partes de crecimiento normal. Tambien debe considerar las dificultades técnicas que implica el tratar de reducir estructuras anatómicas pequetas. Sobre todo el cirujano debe mostrarse simpático y comprensivo al tratar con el niño temeroso y hasta histérico.

RÉSUMÉ

Les fractures de l'adulte et de l'enfant posent au chirurgien des problèmes différents. Celui-ci doit toujours être conscient du fait que les os de la face sont en pleine croissance chez l'enfant, et que les malformations et les difformités permanentes des structures faciales peuvent résulter de l'interférence avec la croissance normale. Il doit aussi considérer les difficultés techniques inhérentes à la réduction des fractures osseuses chez l'enfant. Le chirurgien doit également avant tout faire preuve de beaucoup de sympathie et de compréhension, car il se trouve souvent en présence d'enfants craintifs et parfois hystériques.

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Logic seems to be the art by which we enforce the conviction of some truth, and eloquence a gift of the soul which enables us so to sway the hearts and minds of others that we can inspire or persuade them as we please.

Eloquence may be found in all kinds of speech and writings. It is rarely met with where it is looked for, and sometimes exists where least expected.

It is a great misfortune neither to have enough wit to talk well nor enough judgment to be silent.

We come across would-be wits at every turn. Every country teems with them. But a really witty man is a rarity. And even when such a one is to the manner born, it needs great tact to sustain the part for any length of time. He who makes it his business to amuse us does not generally gain our esteem.

—*La Bruyére*

Plastic and Reconstructive Surgery

Repair of Superciliary Alopecia

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THE eyebrow is a musculocutaneous elevation covered with hair, situated above the superior eyelid, and discretely accompanies the supraorbital ridge (superciliary arch). It may be divided into three parts: the head (medially situated); the body, and the tail (laterally). Between the two eyebrows is what is called the intersuperciliary space.

According to Sheehan,[1] the eyebrows have two important functions. The first is protection of the eye from rain, perspiration and excessive light; and the second and more obvious is aesthetic; in fact, the lack of eyebrows alters the patient's appearance most strikingly and gives rise to social maladjustments urgently requiring correction.

Superciliary anaplasty is fairly easy to perform, and the results that can be obtained are really satisfactory. If they are not perfect, it is only because of the quality of the hair transplanted, whose follicles appear to retain all their original specificity.

Etiologic Factors.—Some *infections* may be responsible for the fall of hair from the eyebrows (leprosy, syphilis, blastomycosis). Roentgen therapy, generally speaking, is also responsible for superciliary alopecia in some cases. In addition, one should include *trauma*, e. g., burns or loss of scalp.

Operation.—Antisepsis is obtained with iodized alcohol. Local anesthesia is employed.

1. The incision accompanies the natural course of the eyebrow (supraorbital ridge, beginning about 1 cm. from the root of the nose and finishing level with the zygomatic frontal suture) as far as the periosteal plane.

2. All bleeding vessels are clamped.

3. Two grafts are made of scalp from the parietal region (retro-auricular), each in the form of a much elongated isosceles triangle. The thickness of these grafts can be estimated when one considers that the detachment is made next to the plane of soft connective tissue, just underneath the galea capitis.

4. Each graft is sutured at the borders of the recipient bed, which has been pre-

Fig. 1.—Bilateral superciliary alopecia. Postoperative view.

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pared for the purpose of obtaining perfect coaptation.

5. Detachment and suture of the borders of the wound in the donor area are next accomplished.

6. A petrolatum dressing is applied, with a cotton-wool bandage kept on for ten days.

Evolution of the Graft.—It is interesting to note that for nearly thirty days an actual dark scab persists over the graft, owing to the intervening hair, a certain serosity, blood, dust and perspiration. This scab falls off at the end of that period, owing to spontaneous epitheliolysis. The hairs are also dragged, this being the reason the graft becomes alopecious. From the second month onward, however, the hairs begin to grow, so that by the end of the third month the patient shows well-formed eyebrows.

Fig. 2.—Preoperative (*left*) and postoperative (*right*) photographs of patient with bilateral superciliary alopecia due to nitrous acid burn.

Fig. 3.—Unilateral superciliary alopecia due to burn, before (*left*) and after (*right*) operation was performed. Taken during the phase of the dark scab (see text).

Fig. 4.—Partial unilateral superciliary alopecia due to burn. Anteroposterior and profile views before and after operation.

COMMENT

One important point is the prior demarcation of the site and shape of the recipient bed. Without taking this precaution into account, one runs the risk of getting an unsatisfactory cosmetic result, either through placing the graft too far above the superciliary arch or through the asymmetry that may result between the two eyebrows.

Another important point is the need of directing the hairs, which must point in a mediolateral direction.

As for the dissection level of the grafts, I cause this to pass through the soft connective tissue beneath the galea capitis. To go any farther would bring the periosteum with it. This makes it somewhat difficult for the passage of the newly formed vessels, from the deep layer. Experience leads me to the conclusion that it is preferable to preserve the galea capitis in the grafts, by reason of the following observation: Simultaneously, I kept on one side

Fig. 5.—Bilateral superciliary alopecia due to leprosy. *Left*, before operation; *right*, after operation.

Fig. 6.—Bilateral superciliary alopecia due to leprosy. *Left*, phase of dark scab (see text); *right*, postoperative appearance.

Fig. 7.—Bilateral superciliary alopecia due to leprosy. *Left*, phase of dark scab (see text); *right*, postoperative view.

the graft with the galea, and on the other I removed the galea with a part of the subcutaneous tissue until pilous bulbs appeared. Both grafts were completely integrated, but the graft without the galea, that is, the one with the bulbs exposed, appeared in some instances more rarefied and even showed faults, owing, probably, to the lesion of some of the pilous bulbs.

I withdrew the grafts from the parietal area (retro-auricular) because we found it easier and more comfortable. The choice of the donor region, however, is of least importance once it is judiciously made. There are some who prefer the occipital region;[2] others recommend a free graft of the other eyebrow when the alopecia is unilateral and the existing eyebrow has abundant growth.[3] When it is not so, they prefer regions such as the occipital, the temporal and the mastoid. Barsky[3a] even suggested a pedicle graft of the other eyebrow or, if not, biologic grafts. Maccaferri[4] prefers a pedicle temporofrontal graft, which in my opinion is not to be recommended. Kazanjian,[5] according to the case, uses a pedicle from the scalp, multiple free grafts, a simple free graft from the occipital or temporal region, or a biologic graft. Smith[6] uses a pedicle graft from the other eyebrow or a free graft of the retro-auricular region.

Pick[7] uses a free or pedicle graft from the other eyebrow or a biological graft of scalp. Bankoff[8] uses a pedicle graft from the eyebrow or the scalp. May and Padgett[9] prefer a free graft from the mastoid region.

Free grafts withdrawn from the pubic region must also be mentioned.

Hemostasis of the recipient bed must be thorough; all ligature bindings, however, are to be avoided. Hemostasis is obtained preferably by simply crushing the vessels. An electric scalpel must never be used, since the resultant scar impairs integration of the graft.

Perfect coaptation of the borders is important, in order that all the raw area of the graft may receive maximum nutrition from the recipient bed.

No less important is the final dressing. This should not be too tight; i. e., it should not compress the graft too much. Petrolatum, gauze, cotton-wool and bandage are used. For greater immobilization and as-

surance of success, the bandage itself can serve to blindfold the eyes during the ten days for which the dressing is kept on.

Even though the period of observation has not been long, it seems, at least up to the time of writing, that the hair follicle preserves all of its specificity. For this reason the hairs in their new position retain all the characteristics of normal hair, such as unlimited growth and thinning.

These facts seem to contradict what is known as the law of functional adaptation or functional solicitation, according to which "all transplanted tissue tends to modify, if necessary, not only its structure but also its shape, resistance and size, in order to fulfill well the functions of the tissue it has just replaced." I say "seem to contradict," because only an observation extending over a period of years can assure one as to the existence of that antagonism. The law which states that "it is the function that makes the organ and not the organ the function" is, to say the least, loosely expressed. As the function performed by the eyebrows is rudimentary, perhaps one may find in it the explanation of the absence of the metamorphosis in superciliary hairs.

Fig. 8.—Bilateral superciliary alopecia due to leprosy. *Left*, preoperative view of patient; *right*, patient after surgical intervention. The operation was performed without preliminary demarcation of the area. As a result, the "head" of the eyebrow was placed a little above the correct level.

SUMMARY

The author discusses the problem of superciliary alopecia and points out the probable causes. He then describes the operation and the means of obtaining grafts, and comments on hemostasis, coaptation, immobilization, and the probable specificity of the follicle for growth of hair.

RÉSUMÉ

L'auteur discute le problème de l'alopécie sourcilière et en indique les causes probables. Ll décrit l'opération qu'il pratique dans ces cas, mentionne la façon d'obtenir de bonnes greffes, s'étendant sur l'hémostase, la coaptation et l'immobilisation.

ZUSAMMENFASSUNG

Der Verfasser erörtert das Problem des Haarrausfalls in der Stirngegend und deutet die wahrscheinlich zurundeliegenden Ursachen an. Er beschreibt dann eine Operation und die Möglichkeit, Transplantate zu gewinnen und erörtert die Blutstillung, die Anpassung und Immobilisierung des Transplantates und die wahrscheinlich spezifische Rolle des Follikels beim Wachstum des Haares.

RESUMEN

El autor trata en este trabajo del problema de la alopecia supercilar y de sus causas probables. Después describe la operación y los medios de obtener injertos, y comenta especialmente la hemostasis, la coaptación, la inmovilización y la probable especificidad de los folículos para el crecimiento del pelo.

RIASSUNTO

L'autore descrive il problema dell'alopecia del sopracciglio e ne elenca le probabili cause. Descrive quindi l'intervento incato e i metodi per ottenere un trapianto e adattarlo in modo da attenere la crescita dei peli.

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ADDITIONAL SOURCE

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Good sense is, of all things among men, the most equally distributed; for everyone thinks himself so abundantly provided with it, that those even who are the most difficult to satisfy in everything else, do not usually desire a larger measure of this quality than they already possess. And in this it is not likely that all are mistaken; the conviction is rather to be held as testifying that the power of judging aright and of distinguishing truth from error, which is properly what is called good sense or reason, and is by nature equal in all men, and that the diversity of our opinions, consequently, does not arise from some being endowed with a larger share of reason than others, but solely from this, that we conduct our thoughts along different ways, and do not fix our attention on the same subjects.

—*Descartes*

Seccão em Portuguéz

Tendosinovite Tuberculosa da Mão

ALIPIO PERNET, M.D., F.I.C.S.*

SAO PAULO, BRAZIL

A TENDOSINOVITE tuberculosa constitue uma afecção de grande importância médico-social não só pelos seus aspectos funcional e anatômico como, principalmente, pelas recidivas e complicações sempre possiveis.

Enfermidade pouco frequente e que se presta a confusões no diagnóstico e na orientação terapêutica merece, por isso, uma atenção especial, sobretudo modernamente, quando a patologia vem recebendo farta experimentação.

A oportunidade que tivemos de tratar, cirurgicamente mais dois casos de tendosinovite tuberculosa da mão no Serviço de Ortopedia do Hospital Matarazzo, sob a orientação do Prof. Dr. Américo Nasser, deunos ensejo de proceder uma revisão do assunto.

(A). *Etiologia.*—Levando-se em conta que a sinovial se destina a reduzir a fricção nos pontos onde a força é transmitida nas epífeses ósteo-articulares compreende-se que essa estrutura sofre contínua ação dos traumatismos.

Na opinião geral a repetição de pequenos traumas representa importante fator no quadro inflamatório favorecendo a localização da infecção tuberculosa. Essa ocorrência é relativamente frequênte entre os operários de chapelaria, tinturaria, marinheiros de barcos a vela, entre os coureiros e ordenhadores.

Na opinião de Iselin (1955) o comprometimento das bainhas sinoviais da mão pela infecção tuberculosa constitue um achado mais ou menos raro, surgindo porem de maneira insidiosa, através surtos repetidos levando a graves incapacidades funcionais. Esse A. acha que também há possibilidade de generalização da moléstia pelo aparecimento de metátases demonstrando a elevada afinidade que o bacilo tem pelas serosas.

Piulachs (1955) considera a afecção pouco frequente e diz que já ficou provado ser quasi sempre primitiva, sem lesão óssea.

Cutler (1942) afirma que a tuberculose é uma das causas mais frequentes das tendosinovites das mãos e a condição que mais intimamente interfere com as suas estruturas, levando, ao fim de algum tempo, a sérias alterações funcionais. Ao contrário dessa opinião Bunnell (1944) pensa que somente de maneira fortuita o bacilo da tuberculose demonstra sua predileção pelas bainhas tendinosas, preferindo o A. condicionar à ação dos agentes traumáticos a responsabilidade pelos danos estruturais. Dá grande relevo ao estádio pulmonar da moléstia, ao tipo e a virulência do mycobacterium em relação a resistência individual.

Em oposição a essa concepção Hohmann (1955) considera a tuberculose como o fator mais frequente entre as inflamacões específicas dos tendões e bainhas tendinosas. Cita Garre que em 1891 já assinalava a existência de três formas características

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(higroma de grãos riziformes, fungus e abcesso frio) evoluindo gradativamente ou de maneira associada.

Schmidt (1938) contrariando outros AA. considerava que a contaminação pelo bacilo bovino se dava pela penetração através pequena lesão digital exemplificando os casos de dois açougueiros que se infectaram durante o exercicio da profissão. Cita Muehsam que, mais ou menos na mesma ocasião, descrevia três casos de enfermeiros que se contaminaram quando limpavam escarradeiras de pacientes tuberculosos.

(B). *Evolução.*—Os primeiros sintomas clínicos surgem, habitualmente, depois de alguns mêses, na dependência de processos inflamatórios produtivo-proliferativos das bainhas tendinosas e sinoviais predominando sôbre os fenomenos degenerativo-destrutivos dos tendões.

A marcha evolutiva é silenciosa, assinalada por surtos agudos, emquanto que a infecção se vai propagando por extensão sucessiva, em prazos variáveis, tudo dependente da intensidade da moléstia e dos fatores traumáticos associados.

Acha Piulachs (1955) que as formas clínicas frequentemente descritas são, na realidade, estágios sucessivos, admitindo que a primeira fase (serosa) leva à fase dos grãos riziformes emquanto que a forma fungosa termina em abcesso frio.

Na região palmar, por exemplo, a evolução pode durar vários anos, despertando a atenção do paciente apenas pelo aumento progressivo de volume das bainhas. Durante a noite podem surgir crises dolorosas devidas a compressão dos filetes palmares do mediano ou do cubital ou mesmo pelo comprometimento desses nervos.

Após a etapa inicial instala-se, muitas vezes, um período de acalmia no qual a tumefação e os disturbios de flexão se desenvolvem paulatinamente.

O exame local revela, pela palpação, uma consistência gelatinosa com flutuação que decorre do deslocamento do conteudo semi-líquido dando origem a um tipo especial de crepitação ("sinal de Dupuytren").

Na região dorsal o aspecto clínico é diverso: o aumento de volume se localiza ao nível dos metacarpianos. Exceto quando se dá a rutura dos tendões comprometidos não há dores nem disturbios funcionais importantes.

(C). *Diagnóstico.*—Quanto ao diagnóstico diferencial Pack (1939) acentua que os tumores benignos se destinguem das infecções agudas das bainhas pelo aparecimento brusco, febre, dor aguda, celulite superficial e historia clínica de ferida recente, emquanto que nos casos crônicos se torna muitas vezes mais dificil. Recorda que a osteo-condromatose pode dar lugar à identica sensação quando se palpa o tumor, obtendo-se mesmo uma cripitação bastante semelhante à que existe na tendo-sinovite. Nestes casos o exame radiográfico demonstra sombras que permitem identificar a extensão e profundidade. O mesmo acontece nos casos de lipomas onde, a diferença de absorção dos raios X pela gordura, em comparação com o grau de intensidade dos tecidos moles, permite precisar determinadas características.

O comprometimento do esqueleto nos casos de xantomas que se originam na proximidade da inserção dos tendões ou cápsulas articulares pode ser demonstrado pelo radio-diagnóstico.

Os osteo-condromas e os osteomas dos tendões e bainhas, embora de possivel confusão com os sesamoides, podem igualmente ser identificados radiológicamente.

Devemos acentuar a possibilidade de confusão, em determinados estágios da molestia tuberculosa, com os cistos mucóides, os cistos sinoviais palmares ou dígito-palmares e os fibro-sarcomas das bainhas tendinosas.

Torna-se evidente, portanto, a necessidade de precisar o diagnóstico da afecção atendendo a que a orientação cirúrgica é diversa.

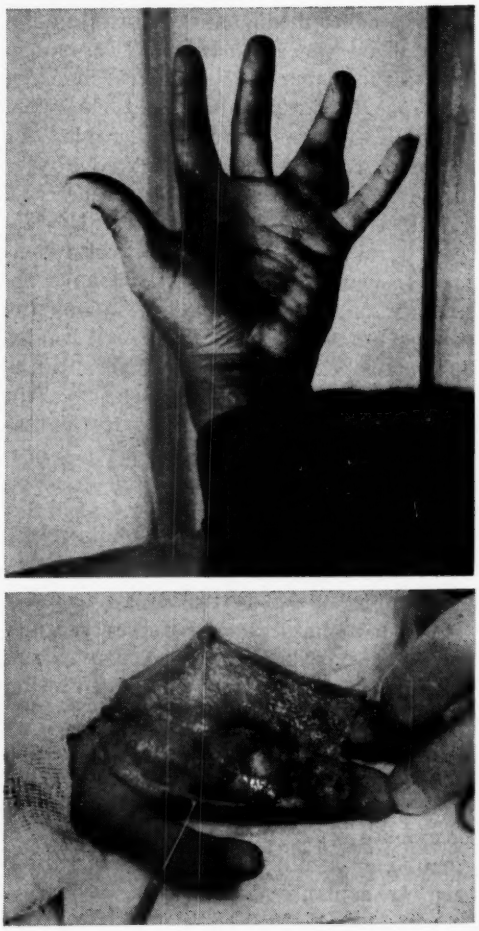

Fig. 1

Revisando a frequencia com que se apresentam os tumores malignos primitivos da mão Clifford e Kelly (1955) analizaram, detidamente, o registro clínico do "Henry Ford Hospital", verificando que entre 757.827 pacientes havia incidência de 9.471 tumores malignos (1,3%) dos quais 0,62% se localizava na mão.

Sabemos que ao nível da mão podem ser encontrados todas as variedades de tumores, alguns comuns a qualquer região do corpo e outros quasi exclusivos pelas particularidades de sua séde e pelas conexões que mantem com as estruturas da mão. Por outro lado é de capital importância o diagnóstico de malignidade no pre-operatório de modo a permitir estabelecer o planejamento circúrgico nas suas diversas fases de execução.

Cabe lembrar aqui, particularmente, a ocorrência de sinoviomas malignos e de tendo-sinoviomas ou fibro-sarcomas, neoplasias frequents e que assumem certo relevo do ponto de vista cirúrgico, sobretudo porque, se apresentam geralmente com aspectos clínicos de benignidade. Na opinião de Harkness (1952) essas neoplasias exibem reduzido grau de diferenciação tissular que leva a confundir a identificação e a nomenclatura.

(D). *Tratamento.*—Estabelecido, o diagnóstico de tendosinovite tuberculosa da mão temos que admitir que o tratamento passou por uma etapa de renovação, graças aos progressos da quimioterapia e,

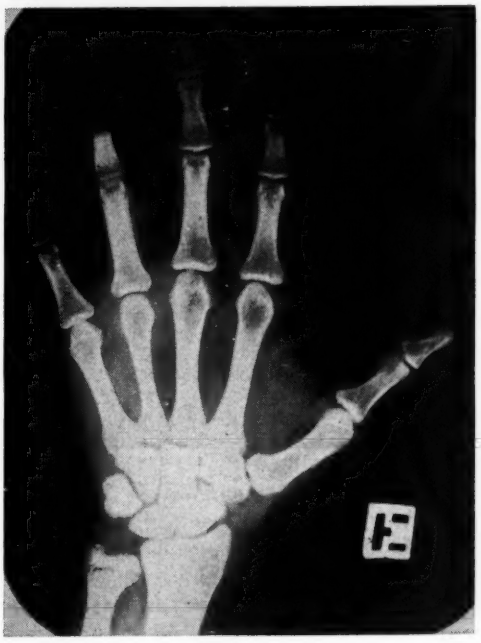

Fig. 2

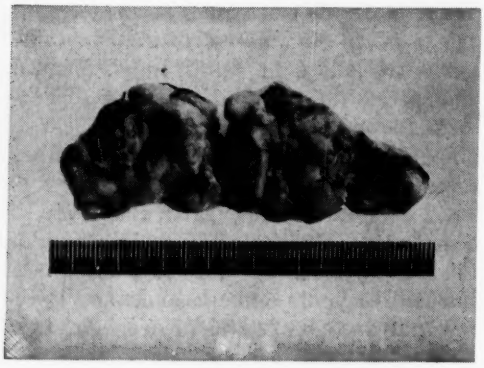

Fig. 3

Fig. 4

sobretudo, pelo decisivo influxo da éra dos antibióticos.

Essas contribuições terapêuticas passaram a integrar a orientação das melhores escolas que instituiram, então, um esquêma de tratamento médico antes, durante e depois da intervenção cirúrgica. Dêsse modo abreviaram o momento da indicação cirúrgica, propiciaram o ato operatório sob a proteção efetiva da quimioterapia dos antibióticos específicos afastando, portanto, os riscos de uma operação precoce.

Embora considerando que o único método curativo que permite o restabelecimento funcional é o cirúrgico, devemos assinalar que os melhores resultados cirurgicos serão obtidos em períodos distantes dos surtos inflamatórios e, especialmente, entre o 2º e 4º anos de evolução.

Resta, o perigo de uma possivel contaminação ou inoculação durante o ato operatorio porque, para conhecer precisamente o estado do tendão, é necessário incisar a bainha favorecendo assim a difusão do conteudo líquido altamente virulento.

A ampla exisão dos folhetos parietal e viceral e a dissecção dos feixes vásculonervosos constituem, inegavelmente, um risco ponderável, mesmo sob a ação protetora da terapêutica farmacológica.

De acôrdo com a situação em que se encontra o tendão, alongado ou totalmente interrompido na sua continuidade, pode-se proceder a reparação imediata pela sutura, como quer Iselin (1955) ou substitui-lo pelo transplante livre como aconselha Mason (1934).

Todos os AA. estão porém de pleno acôrdo com a preferência pelo fio de aço inoxidável evitando, desse modo, alguns insucessos frequentes no passado. Modernamente a drenagem não mais se justifica uma vez que o emprêgo correto da hemostasia previa e a aplicação local de antibióticos mixtos permitem a execução de curativo compressivo por 48 horas em posição funcional para evitar a formação de hematomas. No tratamento pré-operatorio e mesmo na sequencia imediata pode ser usada a hidro-cortisona local que, no entender de Howard Jr. (1953) é 50% mais potente e exerce, algumas vezes, re-

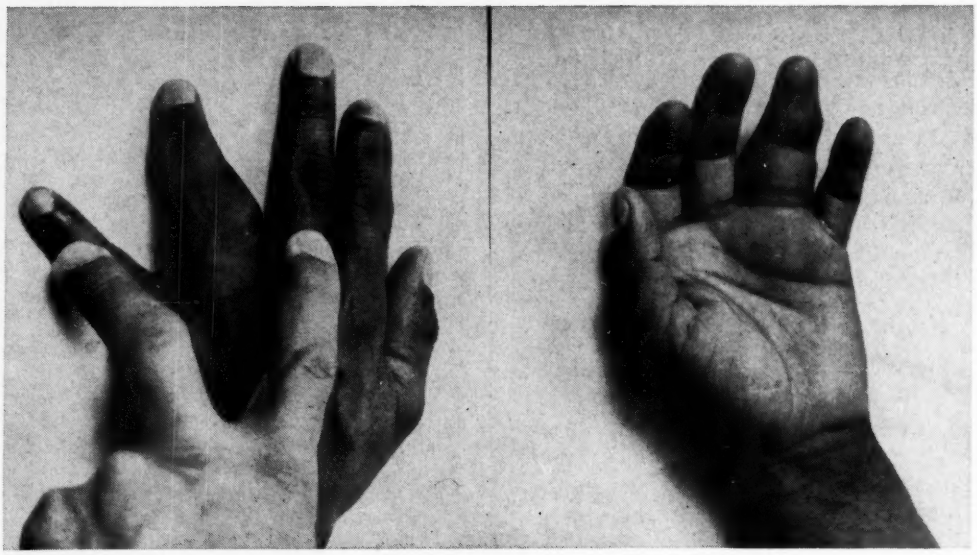

Fig. 5

sultados dramáticos nas tendosinovites.

A estatística desse A. revela melhoria em 90% dos 11 casos tratados. Vale acentuar, porem, que êsse hormonio tem apenas uma ação adjuvante, sem substituir a indicação cirúrgica, mas representa um ponderável fator para diminuir a reação inflamatoria.

Nessa fase em que a permeabilidade capilar aumenta originando o edema pela libertação da hialuronidase a cortisona tem se mostrado o mais potente agente antihialuronidase.

A ocorrência de complicações e metástases proximas ou remotas constitui achado frequente. Bunnell (1944) em 14 casos teve 5 curas emquanto Iselin (1955) refere 10 recidivas em 16 casos operados. Relata êsse A. três localizações à distância: uma lesão pulmonar, um Mal de Pott lombar e um caso de tuberculose renal. Vassicht (1954) na tése apresentada sôbre o assunto refere 30% de recidivas em 20 casos operados e por ele revistos.

Em consequencia dessa evolução tão incerta e do elevado índice de recidivas o prognóstico deve ser considerado com reservas e tanto mais sombrio quanto mais precoce houver sido praticada a intervenção cirúrgica.

Impõe-se, em todos os casos, uma estreita vigilância pelo contrôle clínico, radiológico e pela repetição frequente do leucograma e da éritro-sedimentação.

(E). *Casuistica.*— São as seguintes as historias clínicas dos casos que tivemos oportunidade de operar recentemente:

Caso.—A.V., 38 anos, preto, casado, brasileiro, operário, residente nesta Capital.

Informa que há mais de três anos notou o aparecimento de um ponto endurecido no centro da II falânge do dedo anular esquerdo. De tempos em tempos sentia algumas dores noturnas observando discreta limitação dos movimentos de flexão dêsse dedo o que ultimamente se tornou mais acentuado.

A. exame verificon—se uma formacão

tumoral, de forma irregular, na região da borda cubital e face volar da I falânge do IV dedo esquerdo. A massa de neo-formação tinha consistencia pouco endurecida, compacta na periferia e pouco depressivel no centro onde se percebia uma leve crepitação. Não havia mobilidade apreciável quando se tentava desloca-lo mostrando-se fixa aos planos profundos. Durante a movimentação afiva da flexão, limitada em cerca de 50% da excursão, percebia-se modificação na consistência do tumor e podia ser perceptivel uma estreita conexão com o sistema flexor do dedo. Na região volar, ao nível do IV metacarpiano esquerdo, havia pequenos nódulos, com as mesmas características e firmemente aderentes ao tegumento cutâneo. Não se palpam ganglios nas regiões epitrocleana e axilar esquerdas. O estado da pele palmar era bom e não havia outros sinais inflamatórios locais.

Considerando-se a idade, as características locais e a historia clínica do caso fizemos a indicação cirúrgica pensando tratar-se de uma neoplasia primitiva da mão, possivelmente de um tendo-sinovioma.

Praticamos a sinovectomia ampla tendo o pós-operatorio decorrido normalmente exceto pela ocorrência, na borda cubital da I falânge, de pequena necrose marginal que cicatrizou em pouco tempo.

Realizado o exame histo-patológico por gentileza do ilustre patológista Dr. Godofredo Elejalde foi fornecido o seguinte relatorio:

"Micro-fotografia no. 1: Trata-se de corte de estrutura sinovial observando-se na superfície uma faixa de substância fibrinóide amorfa. Logo abaixo existe tecido de granulação, tuberculoso, materialisado por folículos de células epiteliódes.

Micro-fotografia no. 2: Observamos em meio à trama conjunctiva inúmeras formações foliculares isoladas ou confluentes constituidas por várias camadas de células epiteliódes centradas ou não por células gigantes de Langhans.

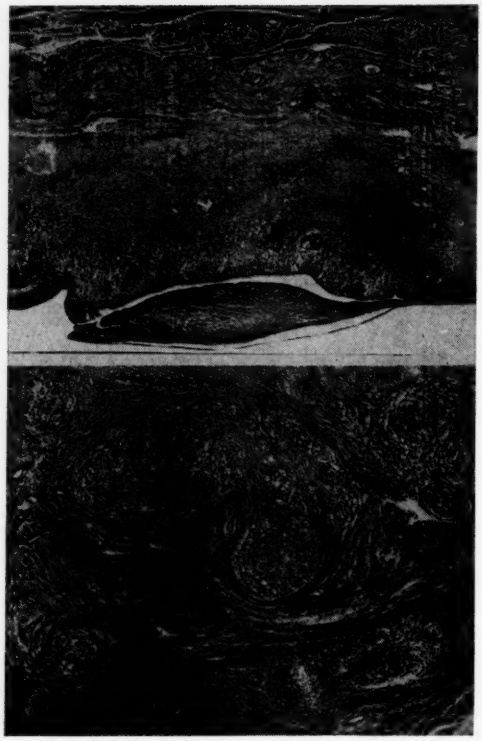

Fig. 6

Diagnóstico: *Tendosinovite tuberculosa.*

Caso 2.—D.O., 26 anos, preto, natural da Bahia, solteiro, lavrador, residente em Cotia, nêste Estado.

Queixava-se na ocasião, de impotência funcional da mão esquerda por forte dor que se localizava, principalmente, no dedo anular.

A pele do citado dedo e da região volar até a prega palmar média estava tensa, luzidia, de coloração avermelhada, quente e endurecida.

O IV dedo se mantinha imovel e extremamente sensivel, impossibilitando os movimentos ativos e passivos. Havia flutuação mais nítida ao nível do ponto de maior elevação e sinais de discreta linfangite da região dorsal do segmento digital comprometido.

Interpretando os fenômenos inflamatorios como sinais de um surto agudo de uma possivel tendosinovite tuberculosa foi prescrita a medicação quimioterápica e alargado o uso da estreptomicina imobilizando-se a mão e o punho.

Cessados os sintomas e restituidos, embora parcialmente, os movimentos de flexão o paciente abandonou o serviço somente retornando após 10 mêses de ausência.

Os exames para pesquiza de B.A.A.R. e a tele-radiografia dos campos pulmonares nada evidenciaram tendo sido também negativo o exame radiográfico para o esqueleto da mão esquerda.

Em Maio de 1956 foi o paciente internado e depois de feito o pré-operatório foi praticada a tendo-sinovectomia larga.

Dissecado o retalho cutâneo evidenciou-se um tumor que se assestava no trajeto dos tendões flexores conforme se pode verificar na figuras. Depois de operado, embora evoluindo satisfatoriamente, foi o paciente submetido a intensivo tratamento médico continuando-o depois da alta que the foi concedida 30 dias depois da intervenção.

O resultado dos exames histo-patológicos do tumor confirmou o diagnóstico de tendosinovite tuberculosa.

A recuperação funcional foi satisfatoria e o paciente retornou ao trabalho 45 dias após a alta.

RESUMO

O A. resalta a importância do assunto e faz uma revisão do tema à propósito de mais dois casos de tendo-sinovites tuberculosas que teve a oportunidade de operar.

Mostra a confusão habitual dessa afecção com os demais tumores da mão cujo diagnóstico diferencial esclarece. Tece comentários sôbre a etiologia e a frequência da contaminação profissional ressaltando a incidência entre os enfermeiros, coureiros, chapeleiros, marinheiros de barcos à vela, ordenhadores e tintureiros, demonstrando a coexistência dos pequenos traumatismos repetidos.

Cita a experiência dos AA. extrangeiros que estudaram o problema da contaminação pelo bacilo bovino e os recursos de inoculão material para firmar o diagnóstico etioloegico nos casos dúbios.

Analiza os aspectos microscópicos das bainhas e tendões comprometidos apresentando micro-fotografias com descrição dos exames histológicos realizados.

Faz referência a diversos AA., citando Bunnell, Iselin, Hohmann, Howard Jr., entre outros, e menciona as revisões dos prontuários clínicos do Henry Ford Hospital e dos hospitais parisienses feita por Vassicht.

Estuda amplamente a evolução da moléstia e estabelece conceitos sôbre as indicações terapêuticas no pré e pós-operatórios afirmando que atualmente os resultados são melhores e a cura mais garantida que antes da éra dos quimioterápicos e antibióticos específicos.

Descreve as historias clínicas de dois casos um dos quais simulava as cacacterísticas do tendo-sinovioma maligno e apresenta a documentação fotográfica e radiográfica dos casos operados.

SUMMARY

The author points out the importance of tumors of the hand apropos of 2 cases of tuberculous tendosynovitis of the hand, operated on in the Orthopedic Service of Hospital Matarazzo.

The differentiation of tendosynovitis from primary tumors of the hand is described, together with the especific characteristics involved.

Comments on the causation and frequency of professional contamination are included, with mention of its incidence

among nurses, leather manufacturers, hatters, sailors, milkers and dyers. The influence of frequent small traumas is also pointed out.

The experience of foreign authors with infection by special strains of bacteria is reported, with emphasis on the necessity of inoculating the laboratory animal in order to obtain precise etiologic diagnosis.

An analysis of microscopic aspect is included, with two photomicrographs illustrating the histopathologic picture.

The author refers to Bunnell, Iselin, Cutler, Mason, Vassicht, Kelly and Clifford, among others, and mentions an analysis done in the clinical records of the Henry Ford Hospital. He points out the evolution of the disease and outlines recent concepts of therapy and preoperative and postoperative treatment, emphasizing the fact that nowadays the final results are better and more guaranteed because of chemotherapeutic agents and antibiotics. He reports 2 cases, in which the condition resembled malignant tendosynovioma, and illustrates them with photographs and roentgenograms.

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To be mindful of my folly is already part of wisdom; to reckon with my weakness is already part of strength; to be content with my poverty is already part of riches. Only to accept my sorrow is not yet part of joy.

As pure light has no color, so pure truth must have no prejudice; as pure waste has no taste, so pure love must have no passion; as pure air has no odor, so pure worship must have no sensuality.

Futile as is the search for perpetual motion, the search for perpetual rest is still more so.

Every truth has its contrary: the wise man keeps to the truth; the fool, to the contrary.

—*Pavin*

Editorials

The Mechanical Transmutation of Life

CONDITIONS never remain static, and perhaps the one unchanging rule of life is change. Yet, throughout the course of history, this rule has operated more or less like the ebbing and flowing of tides, without any great alteration in basic conditions and with continued dependence on Nature's productive storehouse in the soil. As the Bible tells us, "One generation passeth away, and another generation cometh, but the earth abideth forever."

In the past century, or more particularly in the last fifty years, change has so deeply affected us that life has been completely transmuted into a new order of existence. The word transmutation itself deserves emphasis. It is a change, or mutation, so fundamental that it carries us with it *trans*, or across, the boundaries of identity, and adopts a revolutionized form. We are familiar with biologic transmutation of species, such as that of a reptile becoming a mammal, or a quadruped becoming a biped—not simply through adaptation, but by the development of a new anatomical pattern. In chemistry, the dream of transmutation possessed the minds of alchemists for centuries. They conceived the possibility of altering matter by some mystical process which would affect not simply its superficial form or even its molecular structure, but would achieve transposition of its elements themselves. The dream of the alchemist has become the actual achievement of the modern nuclear physicist; but are we prepared to accept the biologic analogy? Has life itself been transmuted into a state of being so different from the past that the change resembles a progression from one species to another?

The answer to this question stares at us if we but look through the windows of current experience and observe the mechanical world around us. We can see, for instance, that the human species has added three new dimensions to its previous existence. The first of these is longevity, which has enlarged by almost one-half its former span. The average human life a century ago approached a little over two-score — far below the biblical threescore years and ten. Now, however, actuarial averages are creeping beyond six decades. Both theoretic and social sciences have combined to make this possible; but the accomplishment itself stands on a materialistic foundation. Science, for example, has required and has built hospitals with laboratories, operating rooms and an arsenal of equipment. The medical profession has needed immense supplies of the so-called miracle drugs, which the pharmaceutical houses are producing on a huge scale and with phenomenal purity. Surgery, too, has contributed its enormous share in prolonging life; and the surgeon of this era is nothing if not a mechanical technician. Although he delves deeply into scientific studies, much of his basic knowledge was already familiar to Hippocrates and to the ancients. He has learned to activate his knowledge with a tool kit that would bewilder Apollo himself; and, using these instruments wisely and skillfully, he now cuts away and replaces, or finds substitutes for, vital tissues and organs to an amazing degree. We have even entered the era in which mechanical substitutes

for specialized organs such as the kidney, the lung and the heart are at least temporarily effective, which leads us to wonder whether we are not still waiting on the threshold of changes that continue to exceed imagination.

The human species has acquired its second new dimension in the conquest of *space*. Man has transformed himself from an earthling to a flying creature. For more than a century and a half he has been able to hang on to the air in a balloon; and in little over a half century he has learned to traverse the air in his plane, or to stand still in the air with his helicopter, or to walk out on the air with his parachute. While we talk of adding the dimension of space, we must not forget the depths of the ocean, which he has likewise conquered—not simply with submarine and bathysphere, but with the aqualung for the skin-diving frogmen. Although the latter accomplishment seems today more like a sport than a serious activity, it nevertheless opens the entire area of the coastal seas to the possibility of becoming a market garden for mankind. The enormous potential addition to man's food supply from such a source may provide a temporary answer to the serious problems of overpopulation that threaten future famine.

Mechanical advances have expanded in yet a third dimension: that of *time*, the fabric of life itself! Supersonic speed, the most startling example of man's conquest of time, possibly influences us least from the standpoint of practical living. Jet planes bring the distant places of the earth much closer, without affecting the daily habits of the average citizen to any great degree. But the application of machinery, harnessed to production, to agriculture, to transportation, and to office procedures, has made possible a vast multiplication of the practical activities of all people in all material aspects of life. The housewife, who is perhaps the most vital member of society, gains as much through the mechanization of her kitchen and laundry as the industrial worker from his assembly line; or the bank clerk from typewriter and comptometer; or the executive from dictaphone and filing cabinet; or society as a whole from automobile and telephone and the thousand other devices that have appeared since the advent of technocracy. In consequence, the man of today lives at a mechanical velocity so much greater than that of half a century ago—not to mention a century back—that his practical activities cannot even be compared with those of the past. And because of the velocity of modern living time is left over in abundance, to be spent wisely, wastefully, culturally, harmfully or frivolously, as man wishes. In this wealth of left-over time we find one of the richest by-products of the mechanical age; one of its greatest opportunities and, possibly, one of its most serious dangers. What is to be done with time?

Beyond the boundaries of his new dimensions, man has also acquired new perceptions of an extraordinary sort. For example, his mechanical eyes, today, permit him to see across the continent through television, and his ears allow him to listen around the world with radio. His vision now penetrates outer space, through the gigantic telescopes whose photographic recordings have given every one of us a clear mental picture of the great nebulae in the belt of Orion. Man may also peek into the secret interstices of inner space through the electronic microscope with its magnification of 20,000 diameters. More than this, the human eye can now look through matter with the roentgen ray and analyze the elemental structure of matter through the banded spectroscope. In a material sense, is not this the eye of a god of some old mythology, rather than that of man as he has been known through the ages?

The ear of modern man can listen to the vibrations of heart impulses in the electrocardiogram or to pulsations of brain waves with the electroencephalogram. Through radar, the human eye and ear have captured the echo by which man localizes objects, directions and speeds in space. Imitating nature, this is an attribute of the bat in its night flight, and perhaps of the wild goose honking northward to an arctic breeding ground—but how much more than the power of bat or bird is the pinpoint tracing of a jet plane crossing great distances at supersonic velocity! It is not enough that man himself has *mastered* these new perceptions; he has now learned to install them in his machines, producing endless possibilities with electronic calculators, Univac, IBM office equipment and the whole world of automation. It is only too obvious that on top of our century of progress, a fresh age of wonders is in the making, like "another morn risen on midnoon," to use Milton's phrase.

Thundering in the background of all this progress stands the fact that man has succeeded in tearing from the heart of nature the secrets of elemental power and utilizing them for his present needs. Consider that from the Stone Age down to a century and a half ago man possessed no artificial auxiliaries other than the sail that could pocket the wind, a simple wheel with wooden paddles that could be turned by running water and fire that could be blown to greater heat by leather bellows. Then consider that in the last hundred and fifty or, at most, two hundred years, man has gathered up the huge strength of the giant Steam and the magic power of the wizard Electricity, not to mention the hidden and stored forces of coal, gas and oil that the soil has held impounded for countless geologic ages, and the compounds of nitrogen, with their shattering detonations. Now at last, man has conjured up and unloosed the cosmic might locked in the atom's nucleus. Its spectral image rises towering above us in horrendous shape, like the genii of Arabian legend, capable of befriending or destroying the human race with its incalculable cataclysm of forces.

From all this it is certainly apparent that man has undergone a transmutation of life as fundamental and as complete as that of the caterpillar who lies in his cocoon and is transformed to a butterfly. The chrysalis of science, fabricated with mechanical skills and stretched around our lives, has engendered a new state of existence that still seems almost incomprehensible in the speed of its progress and the extent of the change it has made. It is, in fact, a supranatural existence, above and beyond anything Mother Nature had bequeathed us.

One element, however, is lacking to complete the analogy of transmutation. Man himself remains unchanged as far as his physical characteristics and endowments are concerned. In fact, we should perhaps admit that the average man of today may show physical deterioration in comparison to his prehistoric prototype. Whenever civilization intervenes to offset the natural laws of survival, the race becomes "damaged by improvement," so to speak. Certainly the primitive savage excels his artificially sheltered descendant in visual and auditory acuity, keenness of smell, hardihood and stamina. This is true also of the intuitive sagacity with which the aborigine learns to outwit a naturally hostile environment. It appears, then, that a curious anomaly exists. We live a totally transmuted and mechanized existence, but in our survival we carry with us, like prehistoric creatures, the same Neanderthal form and anatomic structure that has served our race since the Pleistocene epoch. This startling contrast between the amazing mechanical advances of the

twentieth century and the lack of any compensatory development of the human body illustrates one of the most basic problems of modern life: How far can the human mechanism adapt itself to the advancing mechanisms of science?

Before proceeding, we should recognize that mechanical progress, guided by science, has already provided some artificial aids to the human body. Here the advances of surgery seem less significant than those of modern medicine, which has provided a prodigious array of immunizing agents against most of the great plagues that formerly decimated the race. In the physical branches of aviation medicine, immense stresses and strains of acceleration and deceleration can be compensated, up to 7 or 8 G. (the force of gravity) by pressurized suits and other devices. Pressurized cabins and oxygen masks enable man to invade the stratosphere. There is, however, a strict limit to the mechanical aid that can be given even by the most ingenious developments along these lines; and the concept of space-travel or space-existence seems exceedingly remote when the practical elementary physiologic requirements of man are weighed. As yet there is no way of protecting the body against the heat and cold of the outer atmosphere, or for supplying the body's unceasing demand for oxygen and nutrition, or for reliable stabilization of body pressure in an atmosphere-free environment. Conceivably such problems may be solved; but at present it is man's body, more than any other mechanical factor, that confines him within the wrappings of the world.

Transferring these thoughts from abstract speculation, we may apply them in a practical manner to a simple medical specialty, orthopedics. Here it is common to encounter patients with many complaints and ills that arise largely from neglect of the simplest law of hygiene—*exercise*. The direct cause for abandoning normal exercise is that normal living in a mechanized age no longer requires it and, in fact, in many occupations hardly permits it. Most strikingly is this illustrated by persons holding sedentary jobs, such as office workers, telephone operators, sales personnel, professional men and many categories of industrial employees. These spend most of their "active" lives in sitting down. In years past, the effort of going to and from work partly compensated for their muscular inactivity; but modern mechanized transportation has nullified most of these benefits. Formerly, another antidote to muscular stagnation lay in rural avocations or pastimes, such as horseback riding, bicycling, chopping wood, berry-picking or merely strolling through the countryside. Large numbers of persons today still participate in country club athletics of one sort or another; but a much larger number indulge only in "spectator sports" or automobile cruising. Even the athletic-minded are apt to engage in wholly passive occupations throughout the week, while on week-ends they overexercise their atrophied muscles without adequate conditioning, thereby inviting the sprains and strains that so frequently result. The habit of physical indolence is so widespread and so strongly entrenched today that people not uncommonly refrain from walking three blocks, if they can back a car out of a garage and ride. The modern car itself, with its radio, power steering, push-button window control, built-in air-conditioning, automatic lifts for the trunk compartment and electronic opener for the garage doors, furnishes a blueprint of transmuted existence.

In contrast to all of this, the way of life for which the human body was truly designed can be seen among aboriginal peoples, such as those who inhabited the New Guinea jungles as neighbors of our troops during the war. One incident may be recalled at Noemfur Island, when a line of na-

tive women, or "lubras," shepherded by a few native men, or "boongs," filed through the American camp on the way to their jungle gardens two miles further along. They were, of course, barefoot, and many carried infants on their backs or led toddlers by the hand. Through the day they dug yams, using wooden sticks to prod the ground, as they had no tools. By later afternoon they trudged back, laden with their sacks of yams as well as their children. Before reaching their village they waded breast deep across the mouth of the landlocked harbor, usually shifting sacks and children to their shoulders or heads. Their huts rested on tall piles standing in the ocean, and could be approached only by fallen timbers inclined downward to the beach level. Balancing on these tree trunks, they carried all the stores of food, firewood and fresh water needed for their homes. In many intimate chats with such people over an eighteen-month period, I did not meet even one who complained of backache, or pain in the shoulder, foot strain or the disk syndrome. Hardy Nature appears to be a kindly nurse.

In interpreting our modern orthopedic complaints one might employ the analogy of a mechanical robot, constructed of steel struts held together with springs that would enable it to stand upright and even to walk across the room. Such a machine could be assembled with no difficulty and could be kept in operation by a winding mechanism; but let us consider what would happen to the manikin if all the springs dropped out. Not only would it lose the power of locomotion; it would fall to the floor. And if the mechanical shoulder joints were allowed to hang close to the side, using only one third of their arc of motion, the remaining motion would gradually be lost through rust and corrosion. And if the robot's feet were encased in constricting traps that would distort and compress all their levers and springs, and tilt them at an angle of forty-five degrees from their functional inclination, they would lose their adaptability for walking, just as the modern woman has done in her heeled slippers. What, then, is the remedy for a robot with such orthopedic complaints? An oil can full of medicines would not restore its attenuated springs; an aurora borealis of physiotherapy would not bring mechanical relief; hydrocortone shots at $5 each would not loosen the frozen shoulder; a disk operation at $500 would not compensate for the atrophied back. The robot could only be cured by turning the winding stem, restoring the springs to working order and releasing the traps from the feet. Here, too, is the answer to many orthopedic problems of man in his supermechanized world, with his underdeveloped muscles. The body requires the spring of muscle-tone to support it. There must be frequent, active movements to keep joints limber. They must be stretched and circumducted. All this is exactly what is accomplished by the everyday employments that nature designed before life was transmuted. For complaints of this type, a return to life in the jungles and fishing villages of New Guinea would surpass any rehabilitation a modern scientific center could design.

The most emphatic illustration of physical weakness arising from our mechanized civilization has been provided by this year's White House conference on Youth and Physical Fitness. It was shown that 57.9 per cent of children in the United States failed to meet the minimum physical standard as compared to European children, of whom only 8.7 per cent failed in equivalent tests. An excellent comment on these observations appeared in U. S. News and World Report, August 1957:

> "American youths, generally, probably are softer than those in Europe and many other countries of the world. They are softer, too, than those of previous generations in this country . . . The problem

> traces to the fact that muscle-building chores have disappeared from the scene in most American homes. Gone, too, even in the suburbs, are the woods and fields where previous generations of young people blew off energy and got body building exercise. Children no longer do a lot of walking . . . Buses deliver them to school, and parents have fallen into the habit of chauffering their youngsters even for short distances . . ."

American adults have no reason to be complacent about these facts, for the defects of childhood are harvested in middle age, as any orthopedic surgeon can testify. This accounts for America's excessive incidence of back strain, foot weakness, shoulder pain, knee injuries and industrial disability—all of which are related to the atrophied musculature of a transmuted existence.

The orthopedic weaknesses serve merely as elementary examples of the significance of this problem, which is equally serious in its application to other medical specialties. For instance, nature did not intend the intricate cardiac mechanism to serve a sedentary body; nor did it design the lungs for a filter of cigarette tars. Certainly the stimulus of natural exercise plays a wholesome part in regulating metabolic disorders; and certainly, also, the tensions of competitive society produce unwholesome reactions. In the realm of psychiatry the natural balance of rest and muscular activity has been destroyed; emotional responses designed for primitive existence are now being tortured by the complexities, confusions, thrills and frustrations of an artificial existence. Above all, the velocity of high-speed living in a civilization that has forgotten the meaning of leisure robs mankind of the cultural relaxations and spiritual consolations that form the very basis of sanity. In this connection an amusing incident is told of a big game hunter in Africa, who for three days had harassed and hurried his native bearers to bring his safari as rapidly as possible to the hunting grounds. At a river crossing on the fourth day the natives sat in camp and simply refused to stir. The tribal chief explained reasonably that his followers did not dare cross the river until their souls had had time to catch up with their bodies!

Passing from purely medical considerations, there are many other applications of this same problem: Can man, the Neanderthal being, adapt himself to his mechanically transmuted existence? Time does not permit detailed discussion of numerous phases of this question; but a few may be mentioned in brief outline. For example, it would appear that, just as man fails to show any significant anatomic improvement throughout recorded history; so the human brain fails to give evidence of any increased content of brain cells. No mind today excels, and perhaps none equals, that of Aristotle. Our modern communities can think no better than could various communities of the recent or distant past, and perhaps not as well; the American community that adopted the Constitution, for instance; the Florentine community that nurtured Michael Angelo and Leonardo da Vinci; the Roman community of the Augustan age, or the Greek community of the Fifth Century.

So much for the past—what, then, of the future? Will the human mind be able to solve the tremendously increased complexities of an electronic era, or will intellectual chaos result? To this question the optimist will reply optimistically and the pessimist pessimistically, each according to his nature; but the question is real and the answer uncertain.

Our mechanized life today might lead us to feel as Voltaire did when, two centuries ago, in one of his prophetic utterances, he said: *"Everything that I see around me is sowing the seeds of a revolution, which will infallibly take place."* Certainly in art, music and literature, there is much con-

temporary evidence to demonstrate an intellectual upheaval that has destroyed the basic patterns of modern thought and has substituted nothing but confusion. Classical standards are being generally abandoned in favor of modernism, which seems to conservative temperaments childish, debased and irrational. Or are these tendencies merely by-products of a newly liberated intellectualism? Can we agree with the statement of Henry Ward Beecher that "a tool is but the extension of a man's hand; and a machine is but a complex tool. And he that invents a machine augments the power of a man and the well being of mankind"? Or shall we adopt the more skeptical viewpoint expressed by Kipling in his poem about the auld fleet engineer, "MacAndrew's Hymn": "What I ha' seen since ocean steam began, leaves me nae doot o' the machine; but what aboot the man?" Still a third point of view would be that offered in the whimsical comment of the great Count Buffon: *"If I may be allowed to be perfectly frank, I will say that I don't find the slightest difficulty over Man. The fact is, he is no more than a decadent Ape."*

In closing, it is interesting to observe that this whole problem was anticipated almost a century ago by the remarkably far-searching imagination of Henry Adams. An extract from one of his letters written in 1862 might serve as a summary for the thoughts gathered here. As he puts it:

> ". . . You may think all this nonsense, but I tell you these are great times. Man has mounted science, and is now run away with. I firmly believe that before many centuries more, science will be the master of man. The engines he will have invented will be beyond his strength to control. Some day science may have the existence of mankind in its power, and the human race commit suicide by blowing up the world. Not only shall we be able to cruise in space, but I see no reason why some future generation wouldn't give it another rotary motion so that every zone would receive in turn its due portion of heat and light . . ."

CHARLES H. BRADFORD, M.D.

Felix Mandl: A Tribute

IT was a magnificent conception, that which brought into strong and creative reality the dream of an International College of Surgeons, and it has resulted in a magnificent work for humanity, with a radius of action continually lengthening. The College now diffuses new scientific knowledge throughout the world, immediately upon its discovery at the world's greatest medical and surgical centers; its members stand high in all nations, not only in the scientific but in the cultural sphere; its great assemblies are looked forward to with eagerness wherever one goes, and it has supplied the surgical world with an impressive didactic resource, the Journal of the International College of Surgeons.

Such an achievement, though dependent primarily upon the genius of its Founder, is necessarily the product of many dedicated minds. Surgeons who are outstanding for their unusual talent, their human qualities, their surgical skill and their devotion to the welfare of mankind are always attracted to the radiant core of energy in such an organization and gladly dedicate themselves to its perpetuation and advancement. There are many such men in the International College today—men who ask no material return for the generous contribution of their time, their energy and their ability to the common good. Such men are constantly at work within the College, opening new channels of learning, sharing their valuable experi-

ence without stint, and lending the brilliance of their prestige and authority to the College program.

One of them, and one of the greatest of them, has just left us. The passing of Prof. Dr. Felix Mandl of Vienna was heartbreaking, not only because he can never be replaced but because it came at the very time when the College was preparing to honor him by a *Festschrift*, a special issue of the Journal dedicated to him. At this time nothing more need be said of our loss, but it is worth while to remember once more, as we shall all remember all our lives, his contributions to the College not only as a scientific teaching institution but as an instrument of the free world.

Most men whose names are preserved in the annals of history have been widely known as philosophers, artists, poets, discoverers, statesmen, warriors, captains of industry or prodigies of wealth and worldly success. Most of them have concentrated on one field alone, though there are exceptions, like the great Leonardo, whose versatility encompassed many amazing talents. Most of them have been the subject of wide and inconclusive discussion as to what form of talent and activity is best worth remembering—the speculative-philosophic, the creative artistic, the practical-material, the scientific or the mystical. But in those rare instances in which many talents are combined there is often a natural harmony that puts an end at once to all such conjecture; meeting such a person, one is inwardly satisfied and inspired without asking why.

It was so with Felix Mandl. So many different interests, so many distinct but simultaneous activities filled his life that one was amazed as much by his endurance as by his versatility. In addition to his teaching—and he was a distinguished and dedicated teacher—and his clinical and operative practice, he was one of the most prolific surgical authors of modern times. It would be difficult anywhere, and impossible here, to list in full his contributions to the scientific literature of the world. One of them, *First Aid in Accidents*, is indispensable to those concerned with the problems of industry and sports as related to accidental injury. His criteria for assaying such an injury are still unsurpassed, and the work has classic importance as a treatise on traumatology. He also made studies of inestimable value on the nature and treatment of carcinoma. He has written brilliantly on surgery of the sympathetic nervous system and on recurrent gastric ulcer, which he attributed to what he called *status neuroticus ventriculi*, a form of chronic gastric neuritis. He was the first to prescribe paravertebral injections in the treatment of angina pectoris (1924) and the original proponent of radical operation for parathyroid tumors. At his initiative and on the basis of his precepts, extirpation of the semilunar cartilages was standardized. It was he who proposed skin grafting for uncicatrized wounds, established the preferred treatment of postoperative rectal incontinence and introduced thyroid grafts in the treatment of arthritis.

Indeed, it would be difficult to find another master surgeon who has introduced so many new procedures and technics and has enriched so many therapeutic fields.

It goes without saying that Felix Mandl, while he remained in our midst, was a deeply honored Fellow of the International College, which has awarded him its highest distinction in the well-earned designation Master Surgeon. Such men remain with the College in spirit even after their passing from this mundane scene. While the College remembers him, Felix Mandl lives on, and those who serve the College as he did will not be forgotten.

FRANCISCO GRANA, M.D., F.I.C.S.
Lima, Peru

New Books

Books Received.—The following books have been received by the Editor; they will be reviewed critically as space and facilities permit. Omission of more extended review, however, is not to be taken as criticism of the merit of the book.

Operative Surgery. Edited by Charles Rob and Rodney Smith. London: Butterworth & Co., Ltd.; Philadelphia, F. A. Davis Co., 1956. Vols. 1 and 2 of 8 (plus index). Profusely illustrated.

Proceedings of the Third National Cancer Conference, Detroit, Michigan, June 4-6, 1956. Sponsored by the American Cancer Society, Inc., and National Cancer Institute, U. S. Public Health Service. Philadelphia: The J. B. Lippincott Company, 1957. Pp. 961.

Le Diagnostic du Cancer d'Estomac a la Periode Utile (Diagnosis of Carcinoma of the Stomach at the Time Most Favorable for Treatment). By Rene A. Gutmann. Paris: G. Doin et Cie, 1956. Pp. 257.

Pathology and Surgery of the Veins of the Lower Limbs. By Harold Dodd and Frank Cockett. Baltimore: The Williams & Wilkins Company, 1957. Pp. 462, illustrated.

Spinal Cord Compression. By I. M. Tarlov. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 147, with 41 illustrations.

Men of Medicine. By Katherine B. Shippen. New York: The Viking Press, 1957. Pp. 220. Illustrated.

Muscle Relaxants in Anesthesiology. By Francis F. Foldes. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 210, with 9 illustrations. *Reviewed in this issue.*

The Clinical Management of Varicose Veins. By David Woolfolk Barrow. New York: Paul B. Hoeber, Inc., 1957. Pp. 167, with 70 illustrations. *Reviewed in this issue.*

Surgery of the Anal Canal and Rectum. By E. S. R. Hughes. Edinburgh and London: E. & S. Livingstone Ltd., 1957. Pp. 304, with 276 illustrations.

Halsted of Johns Hopkins. By Samuel James Crowe. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 248. Illustrated.

The Gynecologic Management of Urologic Injuries. By Henry G. Falk. Philadelphia: F. A. David Company, Publishers, 1957. Pp. 265, with 97 illustrations.

Perinatal Loss in Modern Obstetrics. By Robert E. L. Nesbitt Jr. Philadelphia: F. A. Davis Company, Publishers, 1957. Pp. 432, with 108 illustrations.

The Reticular Formation of the Brain Stem. By Alf Brodal. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 87, with 18 illustrations.

BOOKS REVIEWED

Surgery: Principles and Practice. Edited by J. Garrott Allen, Carl A. Moyer, Henry N. Harkins and Jonathan E. Rhoads. Philadelphia: The J. B. Lippincott Company, 1957. Pp. 1,495, with 623 illustrations.

This large work of almost 1,500 pages is well edited. The individual chapters, which literally cover the subject from head to foot, have been written by outstanding authorities in their respective fields. The editors have attempted to place emphasis on the physiologic, biochemical, pathologic and anatomic phases of surgical practice. In this they have succeeded. This work actually constitutes an introduction to general surgery and the surgical specialties (gynecology, neurosurgery, orthopedic and pediatric surgery, thoracic surgery and urology).

It is interesting to note that an effort was made to obtain a cross-section of surgical thought in the United States; hence one editor was selected from the west coast, one from the east coast, and two from the central part of the United States.

For special commendation must be mentioned Chapter 5, which deals with fluid and electrolytes. The method in which this complex subject is presented is praiseworthy. The book has been illustrated voluminously with simple drawings, which express the authors' points succinctly.

This work can be recommended unreservedly.

PHILIP THOREK, M.D.

Muscle Relaxants in Anesthesiology. By Francis F. Foldes. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 210, with 9 illustrations.

This easily read volume explains the modes of action of the several types of muscle relaxants in a readily understandable manner. It is far from being an exhaustive work on the subject, although the extensive bibliography lists 414 references for those desiring more detailed information.

Dr. Foldes discusses first the history and then, in turn, the chemical, physiologic and pharmacologic nature of the muscle relaxants.

The second portion of the book is devoted to the clinical use of these agents. Included in this part are dosage technic, the use of antagonists, complications and the agents most frequently used in anesthesiology. Chapters are also included on the uses of muscle relaxants in other fields, such as electroshock therapy, treatment of spastic conditions and tetanus, and diagnostic procedures. Another chapter is concerned with the use of relaxants in patients with altered sensitivity.

The book is well written by an expert in the field. The illustrations, although few, are so well done that several are destined to be copied and used repeatedly in demonstrating the sequence of events in myoneural blockade. If there is a flaw, it is merely that the author's bias toward the employment of succinylcholine chloride in preference to other relaxants is but thinly disguised.

The book has great value for the clinician who employs relaxants as well as for the investigator who hopes to delve further into this field.

MYRON J. LEVIN, M.D.

Fundamentals of General Surgery. By John A. Gius. Chicago: The Year Book Publishers, Inc., 1957. Pp. 720, with 151 illustrations.

This excellent book will be welcomed by medical students and experienced surgeons alike, though it is primarily intended for the undergraduate student. The author's intent is to set forth, in simple terms, considerations that are fundamental in the study of surgery, including certain aspects of physiology and pathology encountered in practice. He has therefore omitted highly detailed descriptions of technical procedures, consid-

ering these best suited to the postgraduate years. Instead, there is scholarly emphasis on pathophysiologic mechanisms and their natural relation to the holistic concept of the patient, as well as on the dangers inherent in the too narrow perspective all too common among surgical technicians. Implicit in the exposition is the awareness that current knowledge may change and that surgery in itself is too dynamic a process to lend itself perfectly to the static form of a textbook. The author sets forth his own concepts with humility, knowing that they are based on his personal experience and can only serve as a guide to aspiring students. Active participation by the student in ward rounds, participation in conferences and all other possible personal contact with patients are strongly recommended.

For the student, the postgraduate or the surgeon who has become somewhat "rusty" as to recent advances, this book is a *Must*. I have tried as a reviewer to find deficiencies of importance but failed. The work is notoriously free from padding and is an inexhaustible source of information. If one wished to be hypercritical, as some reviewers unfortunately are, one might ask what the author means by "holistic" on page 6, in the foreword? He will not find it in the nearby dictionary. This reviewer looked it up in many dictionaries and finally found it in Webster's New Unabridged International Dictionary, Second Edition, 1957. Therein is is explained that the word is derived from the Greek "holo," "holos," meaning complete, whole, entire. The definition of the noun "holism" is given as "the philosophic doctrine of General Smuts that the determining factors in nature and particularly in evolution are wholes, such as organisms, and not their constituent parts." Hence the adjective "holistic."

Also, being engrossed in the study of the history of medicine, I would suggest that in future editions of this splendid volume, in dealing with the history of anesthesia (Page 22), it would be well not to forget the name of Charles T. Jackson, who contributed so much to the discovery and use of ether.

All in all, Dr. Guis is to be congratulated. I predict that his work will become a classic and an indispensable *vade mecum* for all who are interested in the practice of surgery. Minor omissions fade into insignificance when one contemplates the tremendous amount of work and research here embodied. Only an author on medical subjects can appreciate the heartaches, exertions and sacrifices involved in creating such a truly distinguished work.

Well-selected bibliographic references follow each section, and a comprehensive index concludes the book.

MAX THOREK, M.D.

Occipitoposterior Postions. By Edward L. King. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 106, with 60 illustrations.

The author reviews the fundamental contributions in the literature concerning occipitoposterior positions. The book is divided into twelve chapters and includes discussions of the etiologic factors, conduct of labor in occipitoposterior positions, nonsurgical procedures employed in artificial delivery in such cases, operative methods, the Scanzoni method, the Kjelland forceps, the Barton forceps, other technics, transverse arrest and occipitosacral positions. The last chapter contains an excellent brief summary and the author's conclusions. This is followed by a useful bibliography. There are 60 clear and instructive illustrations in this small book.

This book is well written and clearly printed. It contains a great deal of valuable information, based on the author's extensive experience as a practicing obstetrician, a skillful surgeon and an excellent teacher. It is a worthwhile book.

J. P. GREENHILL, M.D.

New Research Techniques of Neuroanatomy. Edited by William F. Windle. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 98, with 25 illustrations.

This small book is the report of a symposium, "New Research Techniques of Neuroanatomy," sponsored by the National Multi-

ple Sclerosis Society. There are ten contributions to the volume, with sections on electron microscopy, new modifications of silver staining methods, tissue culture methods, the use of radioactive tracers in determining cerebral blood flow, the histochemical localization of acetylcholinesterose and the quantitative histochemistry of the nervous system. There is a foreword by Frederick L. Stone, Director of the Medical and Scientific Department of the Multiple Sclerosis Society.

This symposium can be recommended to those interested in basic investigation of the anatomy and physiology of the nervous system and in new technics and methods in biologic research in general. In the words of the editor, it should help to alert workers to the possibilities of the newer procedures and thus promote the advance of research in neurologic sciences.

HAROLD C. VORIS, M.D.

Degenerative Changes in the Sternoclavicular Joints in Various Decades. By Anthony F. DePalma. Springfield, Ill.; Charles C Thomas, Publisher, 1957. Pp. 178. Illustrated.

This is a monograph in the Bannerstone Division of American Lectures in Orthopaedic Surgery. Orthopedic surgeons and clinicians in related disciplines will find valuable data methodically compiled in this small volume. The observations made in the study establish the norm for the sternoclavicular and acromioclavicular joints in each successive decade of life. They challenge time-honored concepts of anatomic factors responsible for the stability of these joints. The anatomic construction of the sternoclavicular joint is such that it can resist for decades the stresses of function. The acromioclavicular joint, on the other hand, is shown to be less resistant to stress and therefore more prone to early abnormalities.

The author's intent is to present observations that will clarify the pathogenesis of many painful disorders of these joints and to point up the relation of the latter to painful shoulder.

Gross and microscopic observations of the joints during various periods of life are presented. The text is illustrated by roentgenograms, photographs, tables and photomicrographs, which are of outstanding quality.

There is a section in interpretation and correlation of data, followed by a summary and a comprehensive bibliography. The book can be highly recommended.

M. T.

The Human Brain: From Primitive to Modern. By A. M. Lassek. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 242, with 3 illustrations.

This book is apparently written for the educated layman. The author considers the human brain and its functions from the evolutionary standpoint. By far the largest portion of the book (over 140 pages) is devoted to the evolution of the mind. The author has drawn heavily from other writings, both ancient and modern, and not always critically. The book is well written, however, and its dogmatism and oversimplification may be excused, since the intended audience is hardly a critical one.

This book may be recommended to the medical man as an interesting and somewhat provocative presentation and to the educated layman as a satisfactory brief summary of the development of the human brain and mind.

HAROLD C. VORIS, M.D.

Progress in Gynecology. By Joe V. Meigs and Somers H. Sturgis. New York: Grune and Stratton, 1957. Pp. 780.

The third volume of this book is a welcome and worthy successor to the first two volumes. As in the previous volumes, a large number of well-known contributors have written chapters for this book. While most of them are Americans, many prominent foreign gynecologists also helped to make this book as good as it is. There are 55 chapters, and these are divided into the following ten categories: (1) *Growth and Physiology,* (2) *Diagnostic Methods,* (3) *Functional Disorders,*

(4) *Inter-relationships of Endocrine Glands,* (5) *Sterility and Reproduction,* (6) *Infections,* (7) *Benign Growths,* (8) *Malignant Growths,* (9) *Operative Technics, and* (10) *Preoperative and Postoperative.*

Because every contributor is an outstanding authority, the book contains an enormous amount of useful and valuable information. Meigs and Sturgis deserve the deepest gratitude for having collected this series of articles. The book is well printed and beautifully and abundantly illustrated. It should be read by all physicians interested in gynecology, endocrinology, sterility and carcinoma.

J. P. GREENHILL, M.D.

Morphologic and Experimental Studies on the Development and Significance of the Rhombencephalic Longitudinal Cell Columns. By Rune Hugosson. Translated from the Swedish by Victor Braxton. Lund: Hakan Ohlssons Boktryckeri, 1957. Pp. 133, with 48 illustrations.

This monograph is a detailed report of a study of the development of the longitudinal cell columns in the mesencephalon (midbrain) and the rhombencephalon (hindbrain). The cranial nerve nuclei are differentiated within these cell columns. The material used for the study consisted of a series of embryos of Lampetra fluviatilis (lamprey), Torpedo ocellata (fish), Rana temporaria (frog), Gallus domesticus (chick), mus musculus v. alb. (white mouse) and one 13.5 mm. human embryo. There is no description of the human embryo; only the statement that "owing to the marked similarities with the conditions in *mus,* any account would comprise only a series of repetitions."

The author emphasizes the fact that the embryonic longitudinal cell columns are related to longitudinal zones of high mitotic frequency. He also demonstrates experimentally that the substratum (mesoderm) plays an active role in the formation of these embryonic columns. Specifically, he states that the notochord is an influence in the nature of a general mitotic stimulation. In normal material there was no difference in mitotic frequency between alar and basal plates.

In general, the author agrees with earlier investigators, notably C. J. Herrick and J. B. Johnston, on the origin of the cranial nerve nuclei from the embryonic cell columns. The somatomotor nuclei are developed from the ventral column, the visceromotor from the ventrolateral column, the viscerosensory from the dorsolateral column and the somatosensory from the dorsal column. The author objects, however, to considering these cell columns as the anlage of the functional columns of the adult brain and prefers to consider them as building units from which the nerve nuclei of the brain are developed.

Although the details of this study will interest only the investigator in comparative neuroanatomy, the study itself is an example of the painstaking and detailed work on which current knowledge of the anatomy and physiology of the vertebrate nervous system is built.

HAROLD C. VORIS, M.D.

The Clinical Management of Varicose Veins. By David Woolfolk Barrow. New York: Paul B. Hoeber, Inc., 1957. Pp. 462. Illustrated.

This book has 462 pages and is extremely well illustrated. If such a book is written on this one subject, that subject must be thoroughly and completely covered, and this is true in Dodd and Cockett's volume. The foreword, by R. R. Linton of Boston, points out the importance that all cardiovascular surgeons will place on such a treatise. Drs. Dodd and Crockett mention in their preface that they write for the "young trainee surgeon," but all surgeons interested in the treatment of venous problems will find much of value in this volume.

As the title suggests, a great deal of attention is given to physiopathologic aspects, and basically this is good. Perhaps too much space is devoted to the diagnostic factors; there are so many subdivisions in their classification that possibly some surgeon would be "lost" in trying to correlate his patients' problem

with the classifications presented by the authors.

The surgical therapy as applied to simple varicose veins is good, and most surgeons will agree with the author as to the fundamental surgical principles.

In the treatment of the pathologic conditions of the deep veins the authors' efforts to cover every surgical contingency leaves some things to be desired. The therapy varies from what Dr. Linton in his foreword states as "methods described are not sufficiently radical to produce the best results" to a somewhat inadequate discussion of the place of anticoagulant drugs in the therapy of the acute venous occlusion. In general, however, there is great value in their discussions and the book does fill a needed place in discussions of venous surgery.

All surgeons in this field are aware of the problem presented by the patient who has undergone repeated operations without relief of his symptoms. A great responsibility thus descends upon the surgeon who first operates on a patient with pathologic venous changes. He has the ideal chance to relieve many of the symptoms. His success or failure will change the patient's life as far as venous disturbances in the legs are concerned. No surgeon will ever have the opportunity subsequently to do as much good to this patient. Unfortunately, in many hospitals the least thoroughly trained surgeon does many of the venous operations, and, even in the not too distant past, many of them were done on an outpatient basis.

If the authors had done nothing else but emphasize the importance of good diagnosis and treatment by the first operating surgeon, this book would be worthwhile. Drs. Dodd and Cockett have done much more.

The book is well outlined, and the illustrations as mentioned are excellent. Such statements as "general anesthesia is preferable for operations on varicose veins" are not valid, since most American surgeons perform these procedures with spinal or local anesthesia. Other criticisms are that there are many other views on therapy that are considered good by many surgeons which are not even mentioned, and some accepted methods of treatment are dismissed entirely. Some lacks, however, appear in all writing and do not detract from the fundamental impression that the authors have done a good piece of work. The book is a welcome addition to the growing library of cardiovascular texts.

GERALD H. PRATT, M.D.

Gynecologic Surgery and Urology. By Thomas L. Ball. St. Louis: The C. V. Mosby Company, 1957. Pp. 546, with 161 illustrations.

The author's preface to this carefully prepared and beautifully illustrated work points out the fact that "the traditional subdivision of the female pelvic organs into the specialties of urology, gynecology and proctology must be modified to conform to modern surgical concepts and progress." This is true, of course, with regard to practically every division, subdivision and classification of what has been learned in any surgical field. It is Dr. Ball's purpose to show that the interests of the gynecologic patient will be best served when gynecologists expand and intensify their knowledge of the pelvis and its diseases to include all complications that may arise in the intestines and the lower part of the urinary tract.

The text is divided into ten principal sections, under the following titles: *Minor Surgery and Office Procedures; Congenital Anomalies and Psychosomatic Aspects of Gynecologic Surgery; Infections, Trophic and Dermatologic Conditions; Relaxations and Prolapse; Urinary Incontinence, Fistulas and Bladder Surgery; Proctology Associated with Gynecologic Surgery; Benign Tumors and Cysts; Malignant Tumors, Radiation and Radical Surgery; Gynecologic and Obstetric Injuries and Emergencies,* and *Regional Abdominal Surgery Incident to Gynecology.*

Each of these sections presents ample evidence in favor of Dr. Ball's theory. Each is subdivided so as to cover a variety of conditions directly related to the main sectional topic. The writing is clear and concise, and

the abundant and beautifully executed drawings make it even more lucid.

Interest in this new book should be by no means confined to gynecologists. So carefully and ingeniously has Dr. Ball traced the interrelations of gynecologic disease with other pathologic conditions of the pelvis, the intestines and the urinary tract that the urologist and the proctologist should be equally benefited, and the book will have special value for the general surgeon who must include much of the knowledge and practice of several specialties in his daily routine.

M. T.

Experimental Myocardial Infarction and Revascularization. By Rafael Manzanilla. Mexico, D. F.: School of Medicine, National University of Mexico, 1957. Pp. 71, with 19 illustrations.

This is written in Spanish. It is easy to read and to understand, and all the subjects are clearly presented and discussed.

It is divided into eight chapters, which include a description of the anatomic aspects of the canine coronary system; of the methods used for experimental acute and chronic coronary occlusion, together with their immediate and late effects, and of the macroscopic and microscopic evolution of experimental myocardial infarction.

The author presents the different methods of myocardial revascularization, especially his own procedure, the transplantation of a splenic graft to the myocardium. He includes a description of the material used and of the surgical and the anesthetic technics.

A discussion of the results and the conclusions arrived at completes this short but well-prepared study. This should be of interest to surgeons and internists, alike, since both are attracted by this fascinating subject.

RUDOLFO DURAN, M.D.

Methods in Surgical Pathology. By Henry A. Teloh. Springfield, Ill.: Charles C Thomas, Publisher, 1957. Pp. 127, with 12 illustrations.

This booklet is a valuable guide for the resident in pathology. It discusses general technic in surgical pathology as well as detailed procedures in handling surgical materials from different organs. In an appendix, the author gives sample descriptions of certain specimens.

The book is clearly written. It contains excellent instructive diagrams and can be recommended highly to all departments training residents in pathology.

W. E.

Mishaps are like knives, that either serve us or cut us, as we grasp them by the blade or by the handle.

There is no good arguing with the inevitable. The only argument available with an east wind is to put on your overcoat.

From the days of the first grandfather, everybody has remembered a golden age behind him.

—Lowell

Abstracts from Current Literature

Intramuscular Injection of Trypsin: Its Value as a Thrombolytic and Anti-Inflammatory Agent. Moser, K. M., New England J. Med. 256:258, 1957.

Reported series in which trypsin has been given intramuscularly to influence thrombotic or inflammatory disorders now include more than 2,000 cases.

Intramuscular injection of trypsin appears to have no significant toxic effects. The experience reported indicates no presently demonstrable effect upon clotting factors and shows that trypsin does not interfere with the simultaneous use of anticoagulants.

Being of low molecular weight, trypsin can be expected to have poor antigenic potency. Cases of apparent allergy may occur.

Assuming that trypsin by intramuscular injection is thrombolytic, the theoretical danger of pulmonary embolization arises. Few cases of embolization during treatment have been reported.

In the treatment of inflammatory conditions, in which bacterial infection is a prominent feature, concern arises about the extension of local infections under the antiphlogistic action of trypsin. Pertinent is the fact that there has been no report of this complication during trypsin therapy.

Local reactions are the major manifestation of trypsin toxicity. Such local irritation is common with other materials delivered, like trypsin, in oily vehicles. Recently, with injection of trypsin in a gelatin menstruum, a marked decrease in significant local reactions was noted.

It has been observed that such reactions can be prevented by the following precautions: care that the delivering needle is not externally coated with the material, so that injection does not leave a "track" from skin to depot site; injection deeply, not superficially into muscle, and avoidance of single doses of more than 7.5 mg. A dosage schedule of 2.5 to 5 mg. every six hours is recommended as initial therapy. Deposits of more than this amount of trypsin and oil yield an undesirable increment of local irritation without therapeutic gain. Doses below this level do not appear to be an adequate test of the agent. It is also probable that the therapy should be abandoned as ineffective in most cases in which inflammatory features have not been greatly improved within forty-eight to seventy-two hours.

Certain trends with regard to the probable value of this agent in different situations have become apparent. In the first place, intramuscular injection of trypsin seems to be most effective in patients with evidence of acute inflammation, especially when such lesions are located in well-vascularized areas. In such processes as acute superficial and deep thrombophlebitis, cellulitis, acute ocular inflammation and trauma, reported results are in agreement that resolution of the inflammatory component will be hastened in most cases. Second, although accumulated experience suggests that trypsin given intramuscularly may have thrombolytic effects in certain cases, such actions are inconsistent. For reasons that are not clear at present, these lytic effects occur frequently in cases of acute superficial thrombophlebitis, and the agent appears to have particular value in the treatment of this disease. But in thrombotic states that are relatively "bland," in that inflammatory reaction is either absent or of extremely low grade (such as peripheral arterial occlusions), evidence for effective thrombolysis is lacking. The lone exception here is the apparent ability of trypsin gradually to resolve areas of chronic, superficial venous thrombosis. Finally, with regard to that dangerous entity deep venous thrombosis, current opinion is that the chief merit of trypsin resides in its ability to hasten resolution of the accompanying inflammatory reaction. Sufficient evidence of effective tryptic lysis of deep venous thrombi does not exist to warrant the omission of anticoagulants. Secondarily, of course, resolution of the inflammatory component does decrease the interval before ambulation, and the use of anti-

coagulants can be discontinued.

The hemodynamic equilibrium is maintained through a balanced enzymatic system. When thrombosis occurs, trypsin or other enzymatic substances might enhance the natural bodily attempt to resolve such thrombi in two ways; by a direct fibrinolytic action upon the clot or by an indirect attack through activation, by the introduced agent, of the intrinsic lytic mechanisms present in plasma, such as the plasminogen-plasmin system.

Since it has been demonstrated that even massive doses do not consistently achieve direct, acute lysis of clot, the second thesis appears to be the only tenable explanation of the gradual thrombolytic action of small doses. Since the plasma fibrinolytic systems are capable of slowly resolving thrombi, however, it seems reasonable that small doses of trypsin, by maintaining elevated levels of circulating plasmin, could hasten the removal of thrombotic masses. This concept of plasminogen activation has some experimental support, but its acceptance—and perhaps its extension—awaits the appearance of more definitive experimental data.

Correlation of these data suggests the following explanation for the apparent inhibitory action of trypsin upon acute inflammation: Under the excessive local action of proteolytic substances released from organisms, leukocytes and injured tissues, a concentration of polypeptides that stimulates the inflammatory reaction is produced; the natural anti-inflammatory responses of the body involve prominently an elevation of antiproteolytic activity, such activity probably residing in several different agents; and trypsin given intramuscularly, by elevating the level of serum antiproteolytic activity, indirectly promotes inhibition of polypeptide production, thereby halting the local inflammatory stimulus.

WILLIAM E. NORTH, M.D.

Double Ureter in the Child. Stephens, F. D., Australian & New Zealand J. Surg. **26**: 81, 1956.

Double ureters in 28 children were studied by the author, who employed micturition cystourethrographic studies and double and triple micturition tests in their diagnostic workup. The ureter draining the upper portion of a double kidney he calls the ectopic ureter; that draining the lower portion, the orthoptic ureter. He points out that the orthoptic ureter may often conceal as much disease as does the ectopic ureter, or more.

Reflux is a common and important feature of double ureter. Ureteral reflux has no relation to megaureter. The author observed obstructive megaureters only in the ectopic ureters, and the idiopathic nonobstructive ureters were more frequently ectopic.

In treating this condition the author uses simple management, consisting of triple micturition and chemotherapy. When operation is indicated, nephrectomy, or hemiphrectomy with or without ureterectomy, depending on the observations, is done. The author's experience suggests a definite trend toward conservation, with triple micturition a valuable adjunct in the treatment of the disease.

SHEPARD JEROME, M.D.

The Transfer of Blood Between Baby and Placenta in the Minutes After Birth. Gunther, M., Lancet **1**:1277, 1957.

The transfer of blood between the newborn infant and the placenta was studied by continuous records of the baby's weight after normal deliveries and after birth by cesarean section.

The transfer of substantial amounts of blood to the baby was confirmed, but large losses were also observed and were attributed to loss through patient umbilical arteries and by siphonage when the baby was held higher than the placenta.

The large vigorous babies born by cesarean section gained a great deal, but the others gained little.

Pulsation in the cord was prolonged if the mother had been given analgesics.

The author's observations are considered in relation to obstetric practice and the physiologic aspects of neonatal respiration.

EDMUND LISSACK, M.D.

Serum Transaminase Content Related to Tissue Injury. Nickell, W. K., and Allbritten, F. F., Surgery 42:240, 1957.

The authors review the literature pertinent to transaminase reactions in surgical patients. The post-traumatic serum GOT response was studied in 81 patients. A rough correlation was observed between the degree of trauma and the consequent serum operations on the thorax, the cardiovascular structures and the biliary tract, and severe traumatic injuries have usually been followed by abnormal increases in the serum GOT content. Except for these instances, most patients requiring surgical operations have a minor, transient increase in serum GOT; few have elevation to the significantly abnormal range.

Neither blood transfusions nor the type of anesthesia could be related to the post-traumatic serum GOT response from the data at hand.

EDMUND LISSACK, M.D.

Ureteral Calculi: Conservative Management. Gartman, E., U. S. Armed Forces M. J. 8:313, 1957.

The author reviews his experience with ureteral calculi at two different army posts. In 78.5 per cent of 237 cases, ureteral calculi passed spontaneously. The author's criteria for manipulation of a stone are essentially those of most urologists. This paper suggests that most ureteral stones, if small enough and if left alone, will eventually pass of their own accord.

SHEPARD JEROME, M. D.

Ureterocalyostomy: A New Surgical Procedure for Correction of Ureteropelvic Stricture Associated with an Intrarenal Pelvis. Jameson, S. G.; McKinney, J. S., and Rushton, J. F., J. Urol. 77:135, 1957.

The authors describe the surgical procedure used in treating hydronephrotic kidney in an eight-month-old boy. The hydronephrosis was due to a stricture at the ureteropelvic junction.

Drainage of the kidney with a ureteral catheter was first employed because of the child's debilitated condition, due to gastroeneritis. When he was operated upon, an intrarenal pelvis, a severe ureteral stricture with an extremely friable ureter and a division of the renal artery, which prevented splitting the medial parenchyma to expose the renal pelvis, were observed. The stricture was excised and the lower pole of the kidney divided on the convex surface down to the lower calyx. The ureter was sutured to the calyx, and a nephrostomy tube and splint were used. The lower pole of the kidney was sutured over the ureter coursing through it. After removal of the tube on the twenty-second day, low grade fever and pyuria continued. Retrograde pyelograms showed compression of that portion of the ureter which coursed through the parenchyma. On the sixty-second postoperative day reoperation was performed and the lower pole of the kidney excised. The ureter was again sutured to the calyx, and a splinting-nephrostomy catheter was used for drainage. After removal of the drainage tube, the patient remained afebrile and the excretory urogram showed an excellent result.

S. J.

Correction: The Journal's sincere apologies are extended to Dr. Joseph Lloyd D'Silva, one of our October contributors, whose name was accidentally misspelled.

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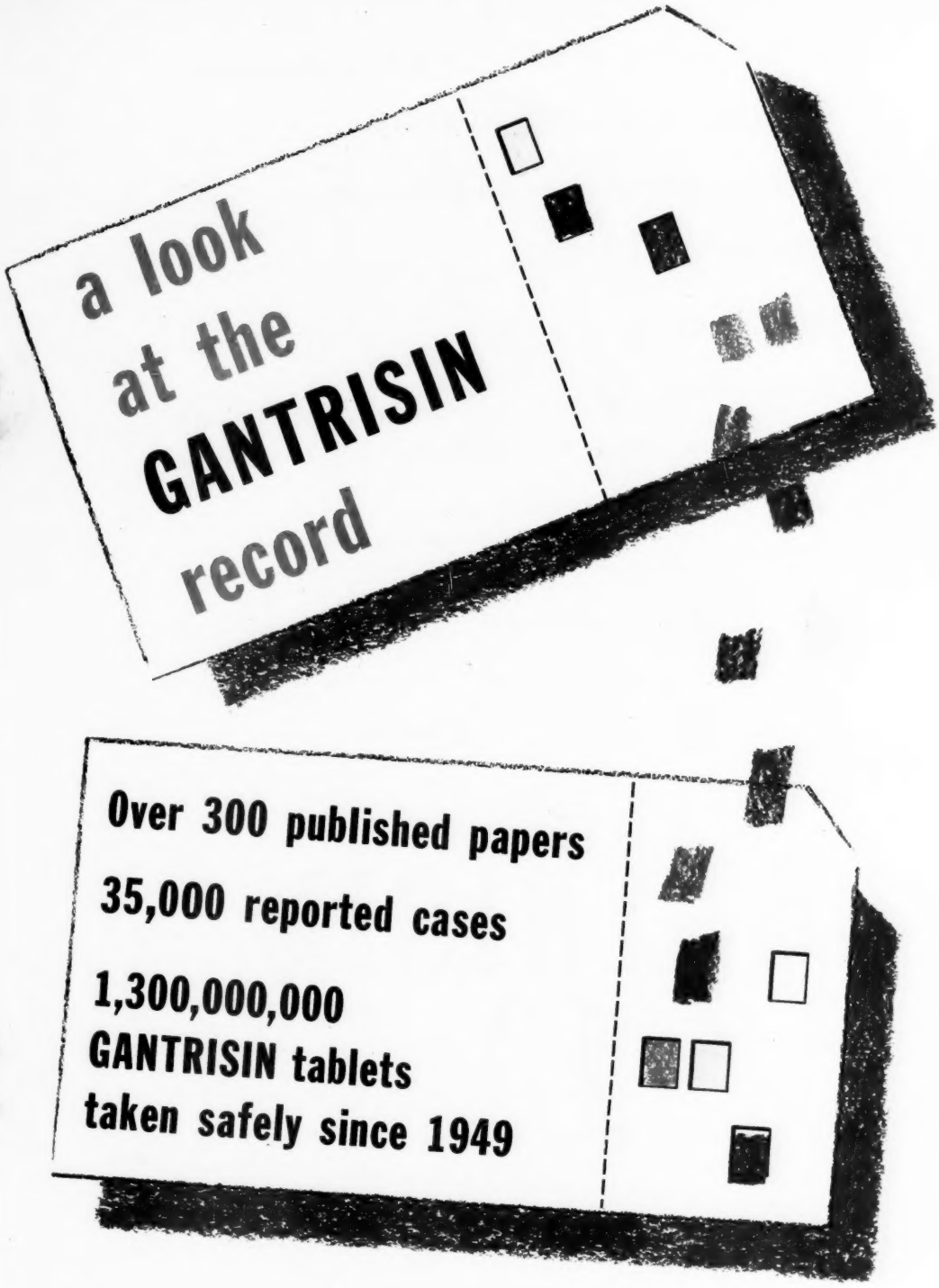
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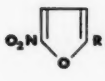

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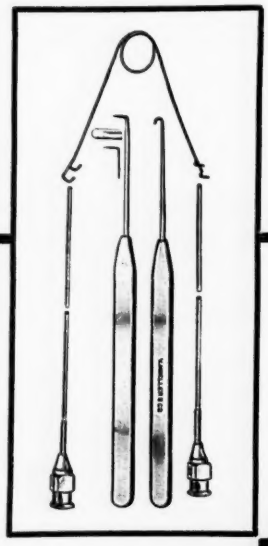

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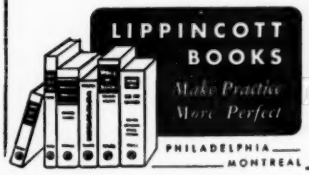

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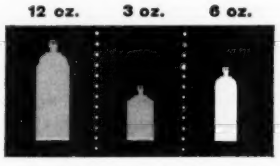

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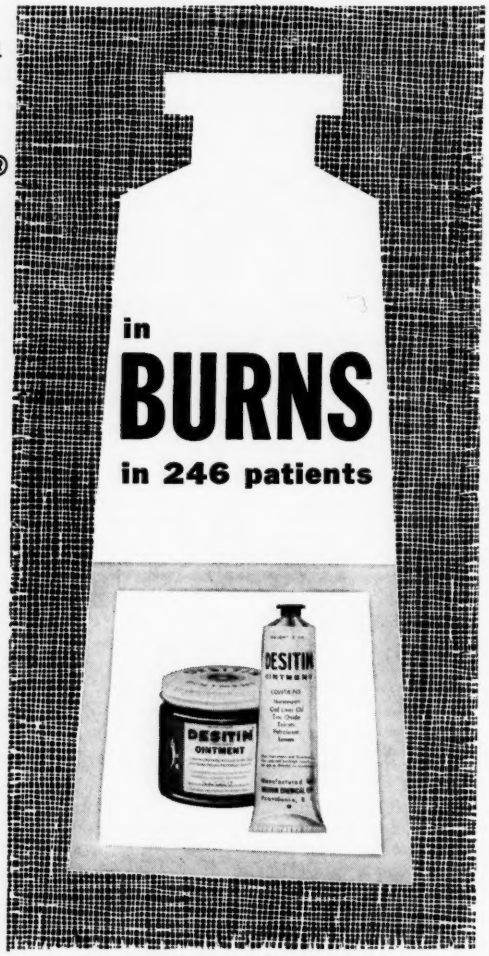

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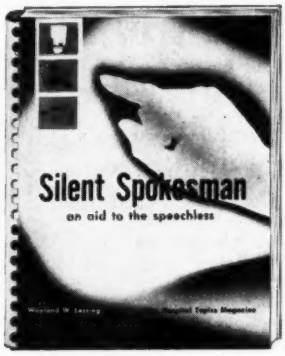

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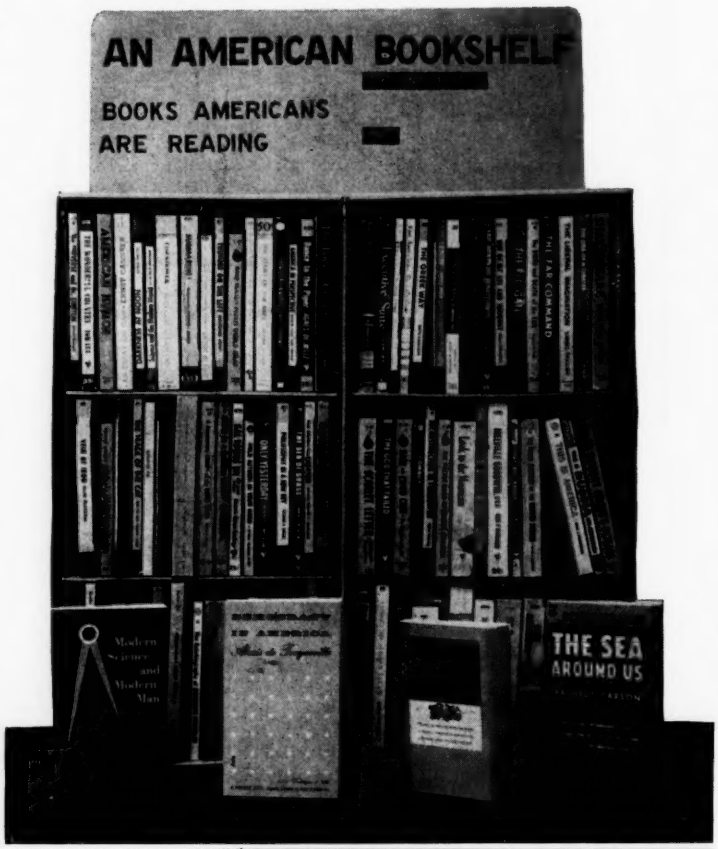

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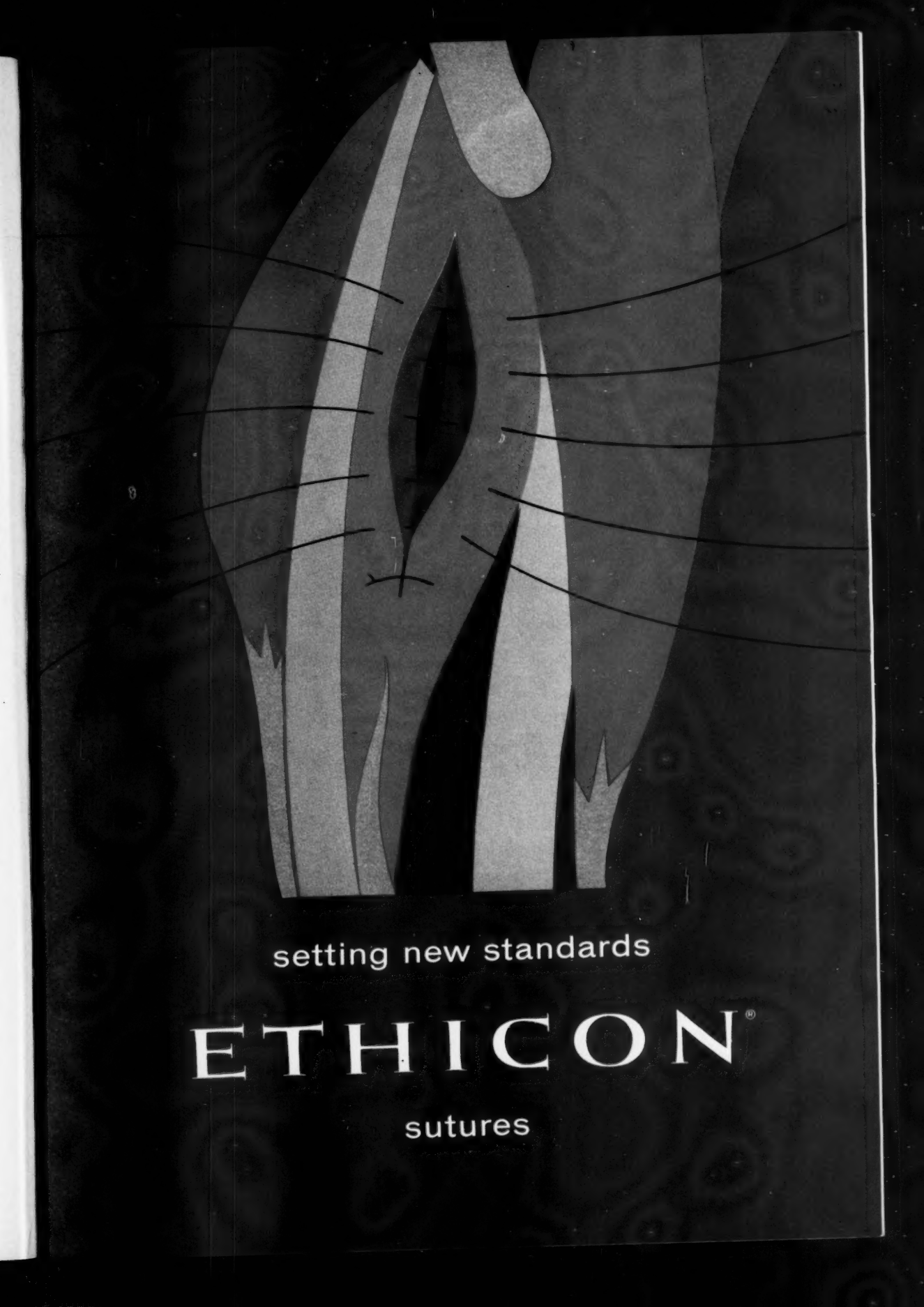
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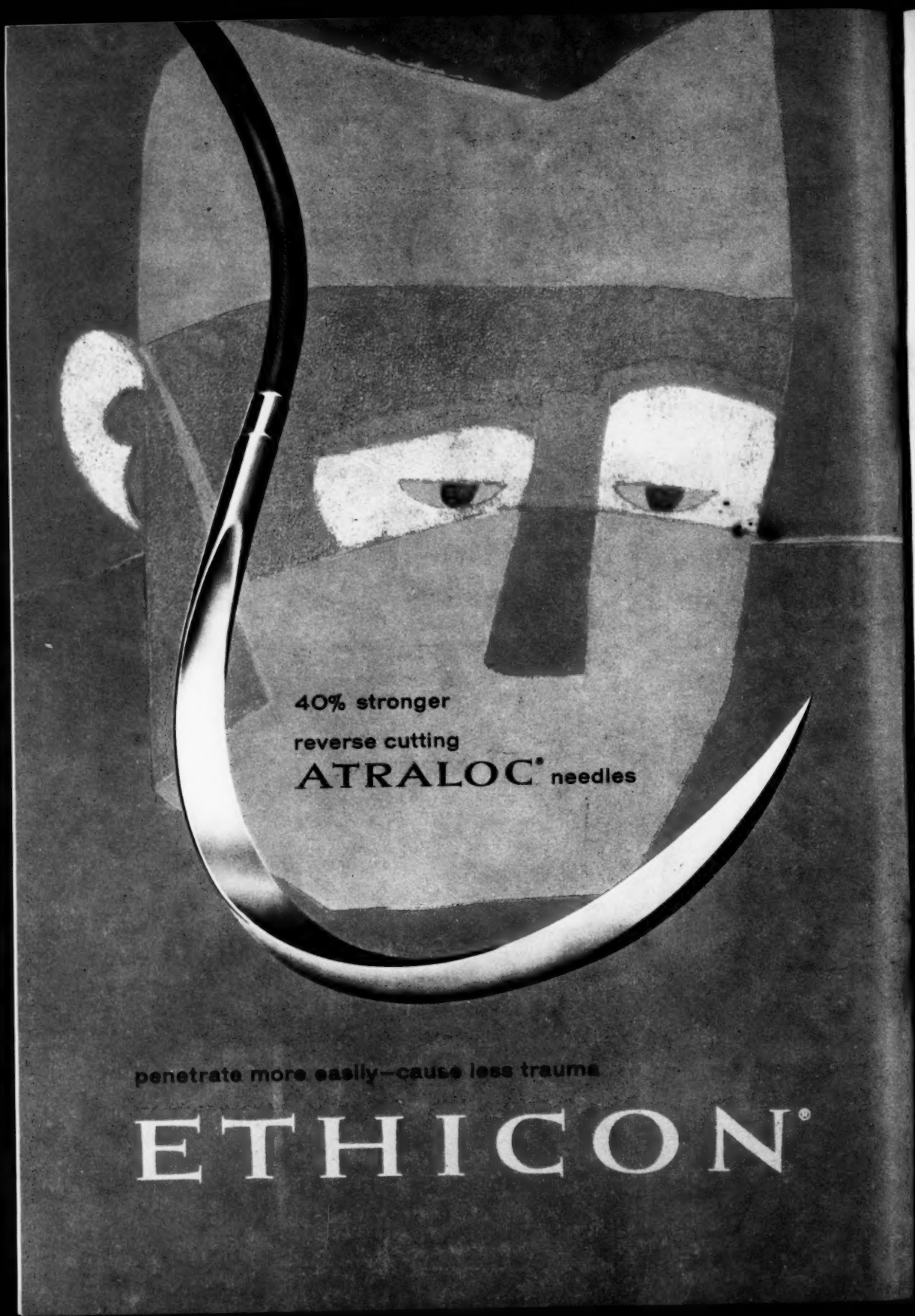
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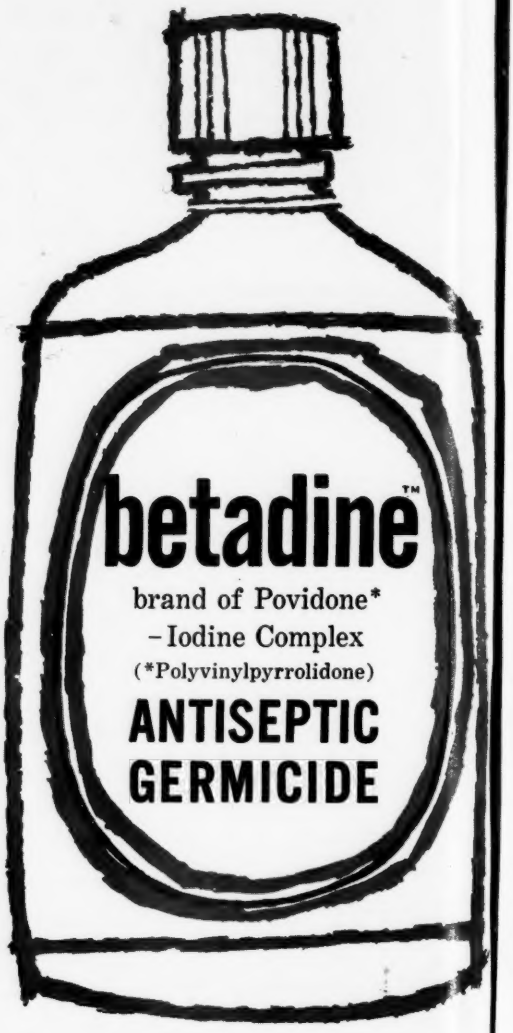

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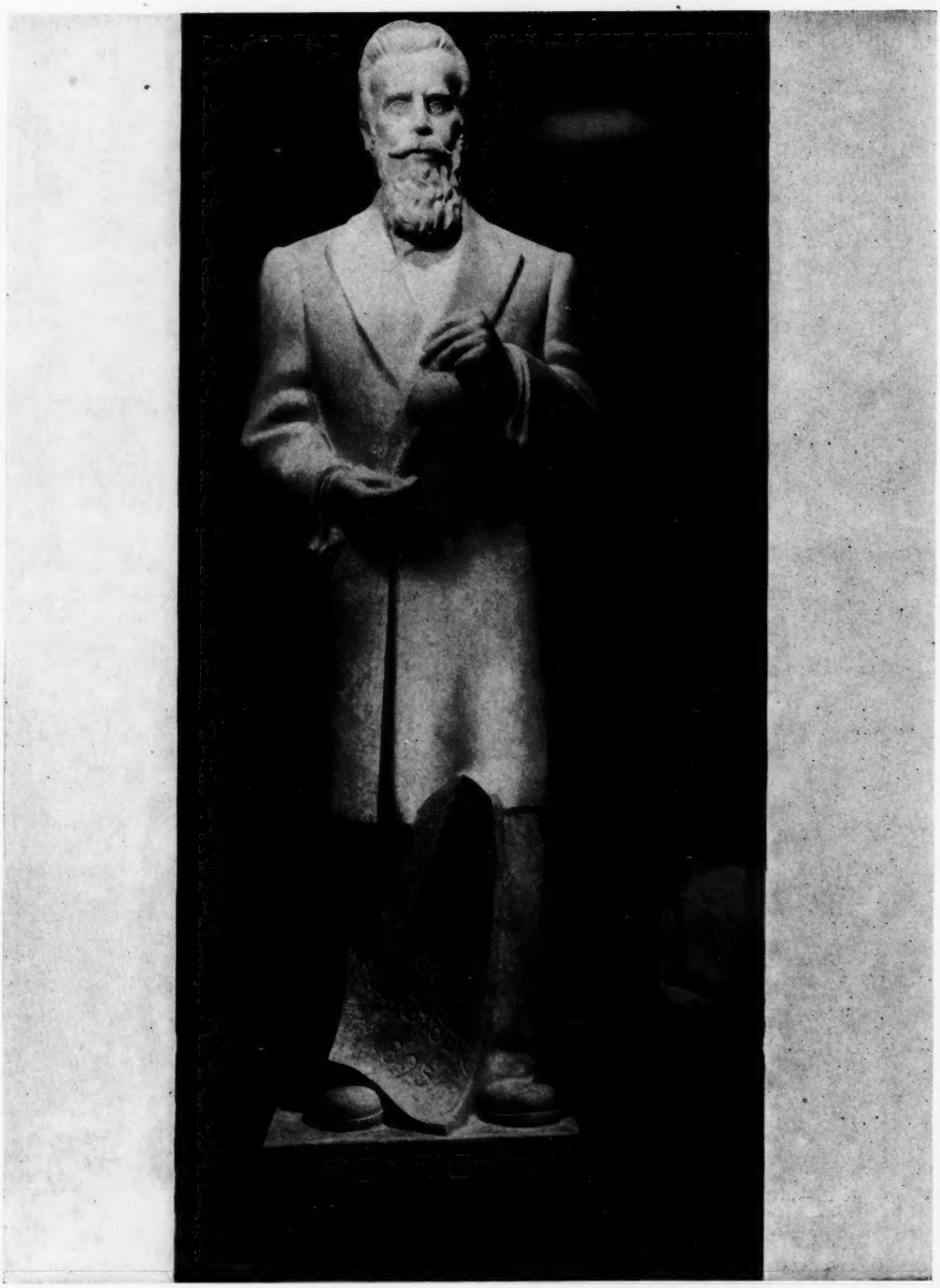


Statue of Röntgen in Speidel Hall of Immortals, Hall of Fame. Sculptured by Mr. Louis Linck.

Comments by the Founder

Quo Vadis?

Once more, with the passing of the month of June, traditionally triumphal for students no less than for lovers, a horde of youths and maidens have launched into life—real life now, and no more time for rehearsal. There is much significance in the images to which real life has been compared since time immemorial: it is called by various persons, at various times, a battle, a challenge, a gamble, a lottery, a pilgrimage and a test. A goal is taken for granted: for the fighter, victory; for the pilgrim, endurance; for the gambler, luck; for the scientist, truth; for the artist, beauty; for the idealist, world peace; and for all the challenged, courage. The points of approach to life are numberless, but there are two elements common to them all: the need of a goal and the knowledge that life is a struggle.

For many years this was matter of course as well as matter of fact. Everyone took it for granted; life's veterans had learned it and strove to pass it on, seeking as best they might to prepare the minds of the young for the inevitable shocks and traumas of daily existence. However sincere and however earnest their efforts, they knew in advance that many would fall by the wayside, for there are those who cannot learn even from experience, to say nothing of precept. These, however, are fortunately in the minority, and it could be hoped that if precept alone did not save the majority, experience added to precept would accomplish it. And it did, in nine cases out of ten. Youth has always laughed at its elders, but only temporarily. I believe it was Mark Twain who said that when he was twelve his father didn't know anything at all, but by the time he was twenty-five it astonished him to see how much the old boy had learned! His experience is so far from unusual that there is probably not a sure, strong, successful man on earth who at one time or another

Dr. Max Thorek

has not encountered it—if not with regard to his parents, then with regard to some other older person freighted with good advice—a teacher, a minister or an elderly friend of the family.

Today, apparently, youth laughs neither at its elders nor at anything else. To judge by the cries of alarm in the public prints, which one must hope are at least exaggerated, youth not only has no inclination to laugh at its elders but apparently wishes to break down the barrier altogether and take on at once the rewards of maturity without the intervening years of effort. Article after article describes this year's crop of graduates as "sober, conservative, distrustful of adventure, hostile to change, desirous above all of security, which they conceive of as early marriage and a modicum of material comforts *which can be counted on.*" Mention of the word "ambition," say the journalists, is met with a shrug of the shoulders. A wife, a comfortable home, a good car, a not too demanding job there's no danger of losing, adequate food and clothing for themselves and their families, and enough money left over to buy an annuity for security in retirement from work—this seems to sum up their desires. "We don't think that's asking too much," one June graduate is reported to have said.

Too much! My poor, dear boy, and this your *ultimate goal?* It is so infinitely little for a *young* man to ask of life that one cannot help wondering what has been done to your mind. Has nobody ever told you of ambition, of aspiration, of achievement of service to others? or, above all, of *growth?*

Have you no dreams, no long cherished ideas to work out, now that at last you are free to follow your bent? Have you no bent to follow beyond the one in the backbone of age? Have you no challenge of your own to fling back in life's face when it hurls its challenge to you? Have you no humility, that you do not desire greatness? For one cannot even approach greatness without it. The things you speak of are the appurtenances of age, and only then if age is fortunate. Moreover, you build your future on shifting sands. There is no such thing as a job that cannot be lost. There is no prosperity that may not vanish overnight. Never since the world began has "security" been anything but a tragic illusion; and to buy an illusion you would give up the struggle before it begins, and relinquish forever the incomparable joy of achievement?

It is a strange, strange concept of youth that the journalists offer us. If it is a true one, Heaven help the world. Once again, as we have done innumerable times in the past, we surgeons may thank God for the profession we chose. We need not worry about those of the Class of 1957 who choose medicine or surgery; whatever their admiration of security, monotony and mediocrity, it will not last long under that challenge! The sleep-walking concept of life is not for the doctor; nor is "security" until he earns it the hard way, and not always even then. His wife and his home and his car and his comfort and his prosperity must wait through a long and exacting period of training; and, although he will indeed never "lose his job" if he performs it competently, it is so far from "undemanding" that the mere idea provokes derision. Indeed, if what the newspapers report is true, *all* the ideas in the mind of the 1957 graduate would provoke derision if one were cynical enough to deride the end of civilization; for, without exaggeration, this is precisely what we should face in a very short time if those ideas were universally accepted by the young. All culture, all art, all achievement, all science and all philanthropy would go down the drain together; universal boredom, that most fatal of diseases of the mind, would become epidemic; and, since Satan in his old age is as skillful as ever at finding work for the idle hands, the inevitable result would be Armageddon and extinction.

We sincerely hope and pray, therefore, that at least some of the alarm expressed by the scribes is unfounded. The doctors and surgeons may have their *aes triplex* in their profession, but the others have not; and, although never in the world's history were doctors and surgeons so needed, others are needed as well. If this sorry situation does exist, it is time for those who educate the young to restudy their methods.

The home . . . is the lens through which we get our first look at marriage and all civic duties; it is the clinic where, by conversation and attitude, impressions are created with respect to sobriety and reverence; it is the school where lessons of truth or falsehood, honesty or deceit are learned; it is the mold which ultimately determines the structure of society.

—Webb

Peace comes only from loving, from mutual self-sacrifice and self-forgetfulness. Few today have humility or wisdom enough to know the world's deep need of love. We are too much possessed by national and racial and cultural pride.

—Donegan

Weary the path that does not challenge. Doubt is an incentive to truth and patient inquiry leadeth the way.

—Ballou

From the Executive Director's Notebook

The Great Lakes Regional Meeting, held at French Lick, Indiana, April 7-10, was under the joint chairmanship of the Regent of Kentucky, **Dr. Joseph A. Bowen,** and the Regent of Indiana, **Dr. Paul E. Haley.**

The scientific program was of high quality. The social activities at this famous spa were in keeping with the tradition of all Great Lakes meetings.

An unfortunate occurrence came in the form of a blizzard, which covered the entire Middle West and caused the cancellation of a large number of reservations. Even so, the meeting was well attended and all who were present were well rewarded. The time and place for the next regional meeting of this area has not been determined.

The California State Meeting was held in Las Vegas, Nevada, on the same dates, April 8 and 9. Unfortunately, this caused some of us to miss the California session. **Dr. Ralph Coffey,** Chairman of the Board of Regents, managed to attend both, though weather conditions made flying very difficult. **Dr. Curtice Rosser,** President of the United States Section, covered the California meeting, while your Executive Director was the official representative at the French Lick meeting. Driving to French Lick was an experience, in that most of it was accomplished in a snowstorm.

After this meeting I attended a special session of the King's County Medical Society in Brooklyn, New York, on April 23. This was a very pleasant affair and was attended by many of the officers of the International College of Surgeons. The main speaker of the evening was **Dr. Richard Cattell,** Director of the Lahey Clinic in Boston, Massachusetts. I was very glad to see Dr. Cattell, as he was one of my Honorary consultants during my tour as Surgeon General of the Navy,

Dr. Ross T. McIntire F.A.C.S., F.I.C.S.

which covered World War II. We are fortunate in having many of the leading surgeons in the Brooklyn area who are Fellows of the International College of Surgeons, and who are giving **Dr. Horace Ayers,** our State Regent, real support and encouragement.

During my visit to New York City, I explored the possibility of the International College of Surgeons returning to that area for a meeting in the not too distant future. The results of this will be announced before too long.

On May 2, it was my privilege to address the International Rotary Club at Bakersfield, California. The program for this meeting, which included all Rotary Clubs in the area, was under the auspices of Fellows of our College. A dinner was given in the evening, which gave me the opportunity to discuss and plan further activities in that area. **Dr. Joseph Manuel de los Reyes,** Regent of Southern California, and **Dr. Ross Parks,** Secretary-Treasurer of the Southern California State Section, came to Bakersfield from Los Angeles. A most useful meeting was held on preliminary plans for the 11th International Congress, to be held in Los Angeles, March 9-14, 1958. Great interest is being shown in professional and civic organizations in California in regard to this meeting, and we have every reason to believe it will be outstanding.

On May 14, the last lecture was held in our present series in the School of the History of Surgery and Related Sciences. This was delivered by **Dr. Chauncey Leake,** an outstanding historian in the

field of medicine and one of the great leaders in the field of preventive medicine. It has been my pleasure to be associated with Dr. Leake in many national and international activities over the past thirty years. His lecture was outstanding, in that he followed the development of surgery from its beginning until today. The title of his talk was "Letheon: the Cadenced Story of Anesthesia."

The success of the School of the History of Surgery has been so marked that the program will be repeated in the coming year. The program will be announced in its entirety in the next number of the Bulletin. All of the lectures given are being published in a volume by the J. B. Lippincott Company. Every Fellow of the College should be interested in securing one of these. The remarkable illustrations used by the lecturers will be reproduced in a great part.

On May 28, **Dr. Ralph Coffey** and I embarked, by train, for Poughkeepsie, New York, where we were entertained in the home of **Dr. Max Simon.** During the afternoon of the 29th, we had the opportunity of visiting the Roosevelt Estate and it was my pleasure to tour the old home with the superintendent of the Park area. As I had visited in the home many times, it was most interesting to me to see the Roosevelt Mansion as it is now—open to visitors. The remarkable thing is that it is a museum, but also a home that seems to be lived in. The library is most interesting and all Americans should visit it if possible; especially those interested in the history of their country.

The Harry Truman Library in Independence, Missouri, and the Herbert Hoover Library in Palo Alto, California, together with the Roosevelt Library, give this generation and those to come a great opportunity to see the inside of history of our times. I hope that succeeding presidents will be able to establish libraries where their papers will be collected and made available to all our people.

The following day, Dr. and Mrs. Simon drove us to Lake Placid, and in that delightful setting the New York State meeting was held. The professional program was outstanding. The attendance at the meeting was over 500. Drs. Horace Ayers, **James Fleming** and Max Simon, together with their committees, did an excellent job in seeing that the members and their families were well cared for and that the entertainment was continuous. It would be unfair to single out any one special paper in this program. The panels were very interesting and were well attended. All in all, this was one of the finest meetings that we have held in many years.

Following this meeting, Dr. Arnold Jackson and I returned to New York City, where we attended the opening meeting of the American Medical Association.

There is much to be done in these coming months. The September meeting, which is the Twenty-Second Annual Congress of the United States and Canadian Sections, promises to be a most interesting one. The outstanding event is the tercentennial celebration of the death of one of the greatest surgeons of all time, William Harvey, who discovered and described the circulation of the blood. Outstanding surgeons from over the world will be present. It is my hope that every Regent and every officer will do all possible to inform the personnel in his State as to the excellence of this meeting. Informational material is now going out to the members.

Plans are going ahead in a most satisfactory manner for the March meeting, which will be held in Los Angeles. This is the 11th International Congress of the International College of Surgeons, in conjunction with the Twenty-Third Annual Congress of the United States and Canadian Sections. As this is being held on the Pacific Coast at a time of the year when winter weather is still prevalent on the Eastern Seaboard and the Middle West, it is hoped that great numbers of surgeons and their families will take advantage of the mild weather in sunny California.

A Word to the Regents and Credentials Committees

The International College is grateful for the splendid manner in which the Regents and their Credentials Committees are screening prospective members. Ross McIntire, the Executive Director, Edward Compere, M.D., F.A.C.S., F.I.C.S., the President-Elect and Secretary of the Qualifications Committee, and I assure those of you who are thus serving the College that your recommendations concerning these applicants will be followed strictly and that if, in some individual case, the Executive Council believes that a mistake has been made by the state organization, no action will be taken until the matter has been taken up with the Regent in question.

OBSTETRICS AND GYNECOLOGY AWARDS OFFERED

The Division of Obstetrics and Gynecology of the United States Section, International College of Surgeons, announces that two awards will be made for the best manuscripts not exceeding 5,000 words submitted by December 1. The first prize will be $500 and the second $300. Contestants must hold the degree of doctor of medicine from an accredited college of medicine, and be (1) interns, residents, or graduate students in obstetrics and gynecology, or (2) teachers of obstetrics and gynecology. Fellows of the college are not eligible.

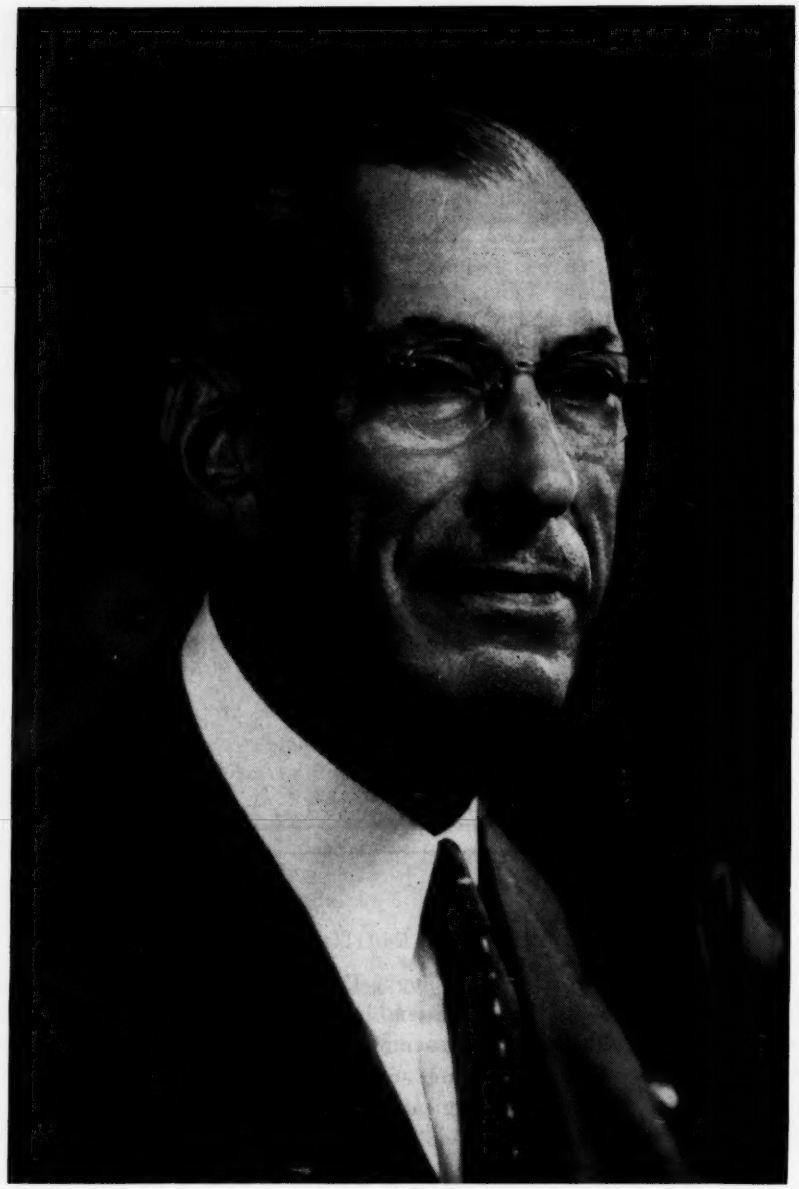
The two successful candidates will be asked to participate in the scientific program of the division of obstetrics and gynecology at the 1958 annual congress of the United States and Canadian Sections, International College of Surgeons.

For information write Dr. Harvey A. Gollin, Secretary, Committee on Prizes, 55 E. Washington St., Chicago 2.

ANNUAL ASSEMBLY IN OTOLARYNGOLOGY

The Department of Otolaryngology, University of Illinois College of Medicine, announces its Annual Assembly in Otolaryngology from September 30 to October 6, 1957. The Assembly will consist of an intensive series of lectures and panels concerning advancements in otolaryngology, and evening sessions devoted to surgical anatomy of the head and neck and histopathology of the ear, nose and throat.

Interested physicians should write to the Department of Otolaryngology, 1853 West Polk Street, Chicago 12, Illinois.



Dr. David B. Allman, F.A.C.S., F.I.C.S., D.A.B., newly elected president of the American Medical Association.

Dr. Allman Elected President of American Medical Association

The International College of Surgeons reports with pride that a Fellow, Dr. David B. Allman, F.A.C.S., F.I.C.S., D.A.B., has been elected president of the American Medical Association.

What manner of man is best equipped to lead one of the world's great medical organizations? The complexities of our time demand that he be more than a highly skilled physician with administrative gifts. He must have a reverence for life, for the worth of every individual. Out of this grows his unique brand of citizenship—a blend of idealism and informed action, fortified with good works.

Such a man is Dr. Allman, whose approach to medicine and life is summed up in his inauguration speech, June 4, entitled "The Personality of Medicine." In it he stresses that the basic values in medicine "are but reflections of the best that must be preserved in all phases of human Life." The personality of medicine is in essence the personality of America; the best in each depends for survival on a "revolution against opportunism, expediency and materialism . . . a return to the original American ideals *of freedom, personal responsibility, individual initiative and, above all, faith in God.*"

A doctor, he feels, is privileged to know life and human nature as few know them, wherein lies his responsibility. He deals with the secrets of life and knows that only God holds the key to them; therefore he constantly must strive for a balance between scientific and human values.

Dr. Allman's career is a testimony to his beliefs.

Born in Philadelphia on July 11, 1891, he was brought to Atlantic City a few months later when his parents, Millard Fillmore and Ray Bacharach Allman moved to the family home in that city. Here they lived with the boy's grandparents, Jacob and Betty Bacharach, in this home which was later to be Dr. Allman's residence and office during his entire practice. His Uncle Isaac Bacharach represented New Jersey's second district in Congress for twenty-two years, and his Uncle Harry Bacharach served several terms as Mayor of Atlantic City. The young Allman may have formed his lifelong interest in government problems out of these influences.

While in high school he worked seven days a week as a drugstore errand boy. In 1910 he enrolled at Jefferson Medical College, Philadelphia, and there began what he remembers as the most enjoyable years of his life. To help pay his tuition, he worked at various jobs, including that of assistant beach surgeon at Atlantic City during the summer.

He graduated from Jefferson in 1914. A classmate who graduated with him was Dr. James R. Reuling, Windermere, Florida who was speaker of the American Medical Society House of Delegates for three years and is now a Trustee. One of his instructors was Dr. George F. Lull, F.I.C.S., F.A.C.S., D.A.B., now secretary and general manager of the American Medical Association.

Dr. Allman interned at Atlantic City Hospital in 1914-15. There he met nurse Katherine Bothwell. They were married in Philadelphia on November 1, 1922. One year later, at the age of 23, Dr. Allman opened his office in the family home at St. Charles Place.

Since then he has lived his philosophy and earned many honors. In 1924 the Betty Bacharach Home for Afflicted Children opened its doors in Atlantic City. It was founded by the Bacharach family, including Dr. Allman's mother. Dr Allman has been medical director since its founding and, after serving on the board of governors since 1941, became chairman in 1956. The home today has an annual operating budget of nearly a million dollars, based

entirely on voluntary contributions, and has treated nearly 3,000 children since its inception, with no regard for race, color, creed or financial circumstances. Dr. Allman has played an active part in all planning and work through the years.

Many are the plaques, certificates and citations that have come to him for meritorious citizenship. His most recent is the resolution adopted by the state of New Jersey, calling him "the state's No. 1 citizen" in recognition of his election to the presidency of the American Medical Association. There is a gold citation from the Medical Society of Atlantic City in recognition of his "medical accomplishments" and citations from the U.S. Navy for service in World War I and the U.S. Public Health Service for work in World War II. Dr. Allman still wears the badge given him years ago by the city fire department when he was made honorary police and fire surgeon in appreciation of his gratuitous care of police and fire personnel. The U.S. Coast Guard has given him a bronze plaque for the "outstanding service" performed in the Pacific by his 42-foot yacht, "Alkada," which he loaned the Coast Guard in World War II.

During one year of practice, Dr. Allman performed nearly half of all surgical operations in the city. Once, when asked how he had managed to build such a large practice, he replied, "By looking at each person as a friend or potential friend, not just a patient." The number of charity cases he handled in the period from 1927-1941 reached four figures.

Yet despite a demanding practice, Dr. Allman has always been active in medical and civic affairs. He once held membership and fellowship in more than 50 associations, clubs and veterans' groups. He has long been prominent in the activities of the American Medical Association, as a member of its Board of Trustees and of its Committee on Legislation. He was made chairman of the latter group in 1952 and made countless trips to Washington to testify before Congressional committees on legislation affecting the health of the people.

Service is a keynote of the Allman family. Mrs. Allman has long been active in the A.M.A. Woman's Auxiliary and in 1949, was made president. When Dr. Allman became president-elect of the A.M.A it was the first time in the history of this organization that a husband and wife had been elected to the two top offices.

Dr. Allman has been a Fellow of the International College of Surgeons since 1938. The College extends to him heartiest congratulations and good wishes for a successful presidency. We feel that the very qualities that brought him new honor are those for which our Fellowship stands—and are thus doubly proud.

When in Chicago, visit the Hall of Fame and the School of the History of Surgery and Related Sciences of the International College of Surgeons at 1516-1524 Lake Shore Drive, Chicago 10, Illinois.

INTERNATIONAL COLLEGE OF SURGEONS FORMS CONTINENTAL FEDERATION OF SURGEONS

The formation of federations of world-renowned surgeons on a continental basis under the aegis of the International College of Surgeons was established at the meeting of the French Section of the College at Rheims, France, on May 23, 1957.

He said the need for such federations developed as a result of the rapid growth of the International College of Surgeons since it was founded in 1935, in Geneva, Switzerland.

Four units have been established, covering North America, Central and South America, Europe and Asia. The College has active national sections in 40 countries, and these will form the nuclei of the federations.

Each federation will develop continental meetings to supplement the biennial congresses of the International College of Surgeons and the yearly sessions of the national sections. This will assure a broader presentation of scientific programs by world leaders in all branches of surgery.

Dr. Curtice Rosser of Dallas, President of the United States Section and professor and head of the department of proctology, Southwestern Medical College, will be the regional director of the North American Federation, which will consist of the United States and Canada. **Dr. Ross T. McIntire,** Executive Director of the International College of Surgeons, will cooperate in the activities.

The European federation will comprise Austria, Belgium, British Commonwealth, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal, Spain, Switzerland and Turkey. **Prof. Dr. John Henry Oltramare,** of the University of Geneva, Switzerland, will be regional director.

Prof. Dr. Jorge A. Taiana, former dean of the School of Medicine, University of Buenos Aires, is regional director of the Central and South American Federation, composed of Argentina, Brazil, Colombia, Peru, Venezuela, Costa Rica, El Salvador, Honduras, Haiti, Mexico and Nicaragua.

The Asiatic Federation will be composed of Burma, Ceylon, China Formosa, China Hong Kong, India, Iran, Israel, Japan, Pakistan, Philippines and Thailand, with **Prof. Dr. Komei Nakayama,** professor of surgery at the University of Chiba, Japan, as regional director.

The International College of Surgeons has sections in all of the principal countries of the world with the exception of Russia and its satellites.

THIRD INTERNATIONAL POSTGRADUATE TOUR

The great success of previous around-the-world postgraduate clinical study courses of the International College of Surgeons has shown the popularity of these travel studies. This professional trip will circle the globe in 48 fruitful days. "Study Abroad" is the theme. Fellows of the International College of Surgeons have made special arrangements for lectures, clinical demonstrations and entertainment in Hong Kong, the Philippines, Thailand, India, Turkey and Greece. **Dr. Arnold Jackson,** F.A.C.S., F.I.C.S., is coordinator of these beneficial worldwide clinics and will travel with the group throughout the trip.

Speed and comfort will mark the 1957 tour. Luxury air lines make practical this visit to the far corners of the world in a reasonably short time. Clinical tour members, their families and friends who may go along on this delightful cruise, will take off from San Francisco on Sunday, October 20, 1957. They will return to the United States on Saturday, December 7, 1957, landing in New York City. Optional return routings are available which permit stop-over privileges in many

European cities—Rome, Zürich, Frankfurt, Copenhagen, Geneva, Paris, Amsterdam, London, Nice, Madrid and Lisbon.

Detailed information about the complete tour and its optional routings is available at International Travel Service, Inc., our official tour representatives, in the Palmer House, Chicago. It must again be emphasized that, since reservations for this course are limited, it is advisable to avoid disappointment by making early arrangements with International Travel Service for prompt booking.

Clinical sessions are directed by: **Prof. Dr. Hiroshige Shiota,** F.I.C.S. (Hon.) and **Prof. Dr. Komei Nakayama,** F.I.C.S., in Japan; **Drs. John Gray,** F.I.C.S., and **Kenneth Hui,** F.I.C.S., in Hong Kong; **Prof. Dr. J. Y. Fores,** F.I.C.S., and **Prof. Dr. E. J. Garcia,** F.I.C.S., in Manila; **Lt. Col. P. Vejjavisit,** F.I.C.S. (Hon.), and **Dr. Sem Pring-Puang-Geo,** F.I.C.S., in Thailand; **Dr. R. N. Cooper,** F.I.C.S., and **Col. K. G. Pandalai,** F.I.C.S. (Hon.), in India; **Prof. Dr. Fahri Abel,** F.I.C.S. (Hon.), and **Prof. Dr. Devris Manizade,** F.I.C.S., in Turkey; and **Prof. Dr. Nicholas Louros,** F.I.C.S. (Hon.), and **Prof. N. Christens,** F.I.C.S., in Greece—and many others.

THE MEMORIAL FUND OF THE WOMAN'S AUXILIARY

In almost every faith there is belief in or hope for future life. Individuals differ in the form of expression of feelings in this matter, and some may insist that there is no such thing as an "after life" or even a remote hope thereof.

Others hold the belief that "in the economy of God there is no death: forms change but the spirit survives!" If one cannot acknowledge even this possibility, the most skeptical must know that we live—for a time at least—in the memory of those who have known us. It is to extend this time of remembrance beyond the life span of those who have known us that we make memorials.

The Woman's Auxiliary of the United States and Canadian Sections of the International College of Surgeons has established the Memorial Fund so that there may be a permanent record in the archives of that organization for all of those for whom such a memorial has been established. By memorial gifts, great and small, this fund grows until, finally, when it reaches an appreciable size, the Woman's Auxiliary will give it to be used for research or to aid in some way the promise of life for others—a truly living memorial!

The use of the Memorial Fund is not limited to members of the College or its Auxiliary. Anyone may make a Memorial to any one, at any time, by contributing a sum—even one as small as one dollar. These sums are deposited in a separate account of the Woman's Auxiliary and are most carefully and economically administered. There are no "extra charges"—to you, to the College or to the Auxiliary.

When the Memorial sum is received by the Fund's chairman, a dignified card of acknowledgment is mailed to a friend or relative of the deceased, as designated by the donor of the Memorial sum. The name of the one to be honored and the name of the donor, together with the date, are then recorded in a special book. The Auxiliary itself, on the passing of a member, establishes such a Memorial.

"Into each life some rain must fall," and when *you* are faced with the passing of a friend or loved one, will you please consider the Memorial Fund of the Woman's Auxiliary of the International College of Surgeons in making your memorial? Please make checks payable to "The Memorial Fund," and forward, with the name of the person to whom the Memorial is to be *made* and the name of the person to whom the Memorial card is to be *sent,* to: **Mrs. Donald L. Dickerson, Chairman of the Memorial Fund, 2315 North Vermilion Street, Danville, Illinois.**

Announcing
The Twenty-Second Annual Congress
of the
International College of Surgeons
In Connection With
Harvey Tercentennial

As we go to press, plans are being crystallized for the Twenty-Second Annual Congress of the United States and Canadian Sections of the International College of Surgeons to be held at the Palmer House in Chicago, September 8-12, 1957.

This year the medical world celebrates the Tercentennial of William Harvey, discoverer of blood circulation. As a part of the Congress program there will be special ceremonies at the International Surgeons' Hall of Fame to commemorate the occasion. On September 11 a wreath will be placed before the statue of Harvey in the Speidel Hall of Immortals. This act will be a symbol of the continuity and universality of science—both aims of the College. In keeping with this theme, **Professor Dr. Leopold Schoenbauer,** Chairman and Head of the Department of Surgery, University of Vienna, and President of the Medical Historical Society of Vienna, will give an address on the Harvey Tercentennial occasion.

There will be many other outstanding Congress participants. The scientific program is under the general chairmanship of **Dr. Raymond W. McNealy** of Chicago, and his co-chairman is **Dr. Richard M. H. Power** of Montreal, Quebec. **Dr. Ross T. McIntire** is Executive Director. Space does not permit a complete listing of all the speakers who will come, not only from the United States and Canada but also from many other nations; however, a partial roster of those who will participate in the various sessions appears below.

Arthur C. Allen, Associate Professor of Pathology, Sloan-Kettering Division, Cornell University Medical College, New York—*The Current Status of the Clinico-Pathologic Correlation of Pigmented Nevi and Malignant Melanomas*

Lyon H. Appleby, Associate Professor of Surgery, University of British Columbia, Vancouver—*Current Concepts of Surgical Management of Peptic Ulcer*

Harry E. Bacon, Professor and Head of Department of Proctology, Temple University School of Medicine, Philadelphia.

M. A. van B. Bastiaanse, Wilhelmina Hospital, Amsterdam, The Netherlands—*Vesiocvaginal Fistulae*

Mario Battezzati, Director, Institute of Pathologic Surgery, University of Parma, Parma, Italy—*The Ligature of the Internal Mammary Arteries in the Surgical Treatment of Coronary Insufficiency*

Claude S. Beck, Professor of Cardiovascular Surgery, Western Reserve University School of Medicine, Cleveland—*Surgical Operations for Coronary Artery Disease—New Physiology*

I. Boerema, Professor of Surgery, University of Amsterdam Medical School, The Netherlands—*Total Gastrectomy*

Wilbrod Bonin, Dean of the Faculty of Medicine, University of Montreal, Montreal, Quebec—*Embryologic Problems in Relation to Surgery*

Robert J. Booher, Assistant Professor of Clinical Surgery, Cornell University Medical College, New York—*Current Concepts in the Management of Carcinoma of the Stomach*

Paul Bucy, Professor of Surgery, Northwestern University Medical School, Chicago

Louis A. Buie, Emeritus Professor, Proctology, University of Minnesota Graduate School, Rochester, Minnesota—*Fistula in Ano*

Daniel Callahan Jr., Professor of Urology, Cook County Post Graduate Medical School, Chicago—*Urologic Complications in Gynecologic Surgery*

John Charnley, Orthopedic Surgeon, University of Manchester, Royal Infirmary, Manchester, England

Raymond Darget, Professor of Urology, University of Bordeaux, France—*Treatment of Bladder Tumors*

Michael R. Deddish, Associate Professor of Clinical Surgery, Cornell University Medical College, New York—*Lymphadenectomy at Time of Resection of Distal Colon and Rectum—Five Year Results*

Frederick A. Figi, Senior Consultant, Section on Plastic Surgery and Laryngology, Mayo Clinic, Rochester, Minnesota—*Diagnosis and Management of Malignant Tumors of the Nasal Fossae and Accessory Sinuses*

Edgar L. Frazell, Assistant Professor of Surgery, Cornell University Medical College, New York—*Surgical Treatment of Cancer of the Tongue*

Alfonso de la Fuente, Professor of Surgical Pathology, Faculty of Medicine, University of Madrid, Spain—*Thoracic Surgery*

Masao Fujimori, Instructor, Kimoto's Surgical Department, School of Medicine, Tokyo University, Tokyo, Japan—*Morphological, Biochemical and Endocrinological Studies of Breast Cancer*

Carlos Gama, Professor of Neurosurgery, Faculty of Medicine, University of Sao Paulo, President, International College of Surgeons, Sao Paulo, Brazil—*Topic to be announced.*

John H. Garlock, Clinical Professor of Surgery, Columbia University College of Physicians and Surgeons, New York—*The Surgical Management of Ulcerative Colitis*

Edwin J. Grace, Instructor of Surgery, Long Island Medical College, Brooklyn—*Uses and Misuses of Antibiotics in Surgery*

Francisco Graña, Former Head of Department and Professor of Surgery, San Marcos University, Lima, Peru—*The Predecessors of Harvey*

Werner Hagmaier, Chief Surgeon, Stadt, Krankenhauser, Schopfheim/Baden, Germany—*Lumbar and Subdiaphragmatic Aortography*

John P. Heaney, Assistant Clinical Professor of Surgery, Baylor University and University of Texas Post Graduate Division, San Antonio—*Chest Injuries*

George W. Holmes, Professor of Thoracic Surgery, Cook County Graduate School of Medicine, Chicago—*Current Concepts of Pulmonary Tuberculosis*

Marc Iselin, Surgeon, American Hospital, Paris, France—*Current Concept of Surgery of Tendons*

Chevalier L. Jackson, Professor and Head of Department of Laryngology and Bronchoesophagology, Temple University School of Medicine, Philadelphia—*The Role of the Endoscopist in the Management of Chest Problems*

Ronald Jarman, Vice President, Association of Anesthetists of Great Britain and Ireland, London, England—*The Anesthetist and His Position with the Surgical Team*

Victor Kremens, Assistant Professor, Radiology, Hahnemann Medical College, Philadelphia—*Roentgenography of the Breast*

Henri Laborit, Director, Experimental and Clinical Research on Artificial Hibernation, Army Research Center, General Military Hospital, Val de Grace, France—*A New Anesthetic Agent* and *The Clinical Application of Artificial Hibernation and Potentialized Anesthesia*

John S. Ladue, Assistant Professor of Medicine, Cornell University Medical College, New York—*The Evaluation and Preparation of Poor Risk Patients for Major Surgery*

Claude Lambert, Associate Professor of Orthopedic Surgery and Acting Head of Department, University of Illinois College of Medicine, Chicago—*The Doctor and the Amputee Problem*

J. Edouard Lemieux, Notre Dame de Ste Croix Hospital, Mont-Laurier, Quebec—*Hernias*

G. Kenneth Lewis, Clinical Associate Professor of Otolaryngology, University of Illinois College of Medicine, Chicago—*Electrical Burns*

Lloyd G. Lewis, Professor, Clinical Urology, Georgetown University School of Medicine, Washington, D. C.—*Diagnosis of Cord Bladder*

Manuel E. Lichtenstein, Professor of Surgery, Cook County Graduate School of Medicine, Associate Professor of Surgery, Northwestern University Medical School, Chicago —*Hyperthyroid Pyloric Stenosis in Adults*

Jacob J. Longacre, Associate Surgeon, Research and Attending Plastic Surgeon, Cincinnati General Hospital, Cincinnati—*Reconstruction of the Head and Neck Following Radical Surgery for Carcinoma*

Raymond W. McNealy, Emeritus Professor of Surgery, Northwestern University Medical School, Chicago

Newton Mead, Assistant Professor of Orthopedic Surgery, Northwestern University Medical School, Chicago

Oliver Monod, Founder of the French Society of Thoracic Surgery, Paris, France—*Hypothermia in Cardiopulmonary Surgery*

Juan Netto, Professor of Clinical Surgery, Faculty of Medicine, and Chief, Thoracic Surgery Department, Ascuncion, Paraguay —*Pulmonary Cysts in Newborn*

Walter L. Palmer, Richard T. Crane Professor of Medicine, University of Chicago—*The Role of Corticotropin and Adrenal Steroid Hormones in the Treatment of Chronic, Nonspecific Ulcerative Colitis*

Philippe M. Polani, Chief Radiologist, l'Hôpital d'Israelite, Alexandria, Egypt—*Radiological Aspects of Duodenal Ulcers*

Gerald H. Pratt, Associate Clinical Professor of Surgery, New York University College of Medicine, New York—*Selection of Patients and Types of Grafts in Aortic and Arterial Replacement* and *Extracorporeal Circulation for Complete Bypass of the Heart and Lungs in Open Cardiac Surgery*

Charles B. Ripstein, Professor of Surgery and Executive Officer, Department of Surgery, Albert Einstein College of Medicine, Yeshiva University, New York — *A New Concept in the Surgical Management of Bleeding Esophageal Varicoses*

Louis P. River, Professor of Surgery, Cook County Graduate School of Medicine, Chicago—*Management of Benign Tumors of the Breast*

Esteban Rocca, Professor of Neurosurgery, San Marcos University, Lima, Peru—*Surgical Treatment of Neuro-Cysto Sarcosis*

Curtice Rosser, Professor and Head of Department of Proctology, Southwestern University Medical College, Dallas

A. K. Saha, Hunterian Lecturer, Royal College of Surgeons of England, Professor of Surgery, Nibratan Sircar Medical College, Calcutta, India

Shigeru Sakakibara, Professor of Surgery, Tokyo Women's Medical College, Tokyo, Japan—*Intracardiac Surgery with Improved Heart-Lung Machine—Studies on the Cardioscope*

Leopold Schoenbauer, Chairman, Department of Surgery, University of Vienna, Austria—*Address for Harvey Tercentennial*

Alvin O. Severance, Professor of Pathology, Baylor University College of Medicine, San Antonio—*Pathology of Benign Tumors of the Breast*

José Soler-Roig, Professor of Surgery, University of Barcelona, Spain—*The Importance of Routine Cholangiography in Gallbladder Operations*

Orion H. Stuteville, Professor Maxillofacial Surgery, Northwestern University Dental School, Lecturer in Surgery, Northwestern University Medical School, Chicago—*Lesions of the Oral Cavity: Infections of the Head and Neck*

Jorge Taiana, Former Professor of Surgery and Dean of Medical Faculty, University of Buenos Aires, Argentina—*Hydatid Cysts of the Lung* and *Cancer of the Lung, Late Results—Five Year Survival*

Gershom J. Thompson, Professor of Urology, Mayo Foundation, University of Minnesota, Rochester—*The Surgical Management of Neurogenic Cord Bladder*

Kazumi Taguchi, Assistant Professor of Surgery, Chief of Cardiac Division, Okayama University Medical School, Okayami-shi, Japan—*Open Cardiac Surgery Under Selective Brain Cooling*

Arthur M. Vineberg, Lecturer in Surgery, McGill University Medical School, Montreal, Quebec—*The Treatment of Coronary Artery Insufficiency by Internal Mammary Artery Implantation—Seven-Year Study*

Harold Voris, Professor of Neurosurgery, Stritch School of Medicine, Loyola University, Chicago

James Watts, Professor of Neurological Surgery, Head of Department of Neurology and Neurological Surgery, George Washington School of Medicine, Washington, D.C.

William L. Watson, Professor of Clinical Surgery, Cornell University Medical College, Associate Professor of Surgery and Director of Cancer Coordination, New York University Bellevue Medical Center, New York—*Esophageal Carcinoma*

Charles Stanley White, Head of the Department and Professor of Surgery, George Washington University, Washington, D.C.—*Clinical Research in Malignant Metastases*

Stimulating Section Programs have been planned—many of them joint ses-

sions. The incomplete schedule follows:

Neurologic Surgery — Chairman, **James W. Watts,** Professor of Neurological Surgery and Head of the Department of Neurology and Neurological Surgery, George Washington University School of Medicine, Washington, D. C.

Tuesday afternoon and evening. Joint with General Assembly, Monday afternoon

Obstetrics and Gynecology—Chairman, Honorary, **Virgil S. Counseller,** Professor of Surgery, Mayo Foundation, University of Minnesota Graduate School of Medicine, Rochester, Minnesota; Chairmen, **J. P. Greenhill,** Professor, Cook County Graduate School, Chicago; **Emmet A. Pearson,** Senior Staff, California Hospital, Los Angeles; **August F. Daro,** Professor of Obstetrics and Gynecology, Cook County Post Graduate School of Medicine, Chicago

Monday, Tuesday and Wednesday afternoons. Joint with General Assembly, Thursday afternoon

Ophthalmology and Otorhinolaryngology—Chairman, Ophthalmologic Surgery, **Girolamo Bonaccolto,** Clinical Professor of Ophthalmology, New York University College of Medicine, New York; Chairman, Otolaryngologic Surgery, **Alan Austin Scheer,** Assistant Clinical Professor of Otolaryngology, New York University College of Medicine, New York

Monday, Tuesday and Wednesday, all day. Otolaryngologic—Joint with General Assembly, Tuesday morning

Orthopedic Surgery—Chairman, **Arthur Steindler,** Professor of Orthopedic Surgery, State University of Iowa, College of Medicine, Iowa City, Iowa

Tuesday and Wednesday afternoons. Joint with General Assembly, Monday afternoon

Plastic and Reconstructive Surgery—Chairman, **Neal Owens,** Clinical Professor of Plastic and Reconstructive Surgery and Head of Department, Tulane University School of Medicine, New Orleans

Tuesday and Wednesday afternoons. Joint with General Assembly, Monday afternoon

Coloproctologic Surgery—Chairman, **Harry E. Bacon,** Professor and Head, Department of Proctology, Southwestern University Medical College, Dallas

Tuesday and Wednesday afternoons. Joint with General Assembly, Tuesday afternoon

Urologic Surgery — Chairman, **Lowrain E. McCrea,** Clinical Professor in Urology, Temple University School of Medicine, Philadelphia

Monday and Tuesday afternoons. Joint with General Assembly, Wednesday, afternoon

Surgical Nurses — Chairman, **Margaret Young,** Chicago

Monday and Tuesday, all day

Inhalation Therapists—Chairman, **Lawrence A. Fruik,** Chicago

Thursday, all day

On Monday evening the Film Forum will be held in the Grand Ballroom of the Palmer House. Chairman of the Forum is **Dr. Philip Thorek,** Associate Professor of Surgery, University of Illinois and Cook County Graduate Schools of Medicine, Chicago. Moderator for the evening will be **Dr. Max Thorek,** Professor of Surgery, Cook County Graduate School of Medicine and Founder and International Secretary General, International College of Surgeons. Speakers and films for the program are as follows:

Jorge Taiana, Former Professor of Surgery and Dean of the Medical Faculty, University of Buenos Aires, Argentina—*Hydatid Cysts of the Lung*

I. Boerema, Professor of Surgery, University of Amsterdam, Medical School, The Netherlands—*Total Gastrectomy*

Henri Laborit, Director, Experimental and Clinical Research on Artificial Hibernation, Army Research Center, General Military Hospital, Val de Grace, France—*The Clinical Application of Artificial Hibernation and Potentialized Anesthesia*

Another highlight of the Congress will be the unveiling of a portrait of Crawford Long, a gift of the Georgia Chapter of the International College of Surgeons. Still other highlights will include the Officers and Regents' Luncheon on Sunday, September 8, at 12:30 P.M. in the Crystal Ballroom of the Palmer House, and on Thursday, September 12, at 7:00 p.m., **Senator Hubert H. Humphrey** of Minnesota will deliver the Convocation Address at the Civic Opera House. The Woman's

Auxiliary, under the leadership of **Mrs. Clifton L. Dance,** President, has arranged lectures, teas and special events for the wives of the doctors attending the Twenty-Second Annual Congress.

For further information about the Program, write:

Dr. Ross T. McIntire, Executive Director
International College of Surgeons
1516 North Lake Shore Drive
Chicago 10, Illinois

PRELIMINARY SCHEDULE

Advance Registration—Sunday, September 8, 10-12 a.m., 2-5 p.m., Fourth Floor, Palmer House

Registration—Monday, Tuesday and Wednesday, 8:30 a.m.—5 p.m.; Thursday, 8:30 a.m.—3 p.m.

Meetings of the United States and International Executive Councils and Board of Trustees, United States Section, Sunday, morning and afternoon

Postgraduate Instructional Courses—Orthopedics, Sunday morning and afternoon; Ophthalmology and Otolaryngology, Sunday afternoon

General Assemblies—Two Sections, Monday through Thursday mornings; One Section, Monday through Wednesday afternoon; Two Sections Thursday afternoon

Film Forum—Monday, 8-10 p.m.

Officers and Regents' Luncheon—12:30 p.m. Sunday

Special Events—Includes Harvey Memorial Ceremony, Tuesday afternoon, Hall of Fame

Canadian Section—Business meeting; 5 p.m., dinner 6:30 p.m., Tuesday

Social Hour and Annual Banquet—Wednesday, 6-10 p.m.

Scientific Motion Picture Program—9 a.m. to 5 p.m. daily

Woman's Auxiliary—Program daily

Section Programs:

Coloproctologic Surgery—Tuesday morning, organizational meeting; Tuesday afternoon, section meeting, 1:30-3:00; joint meeting with General Assembly 3:30-5:00; Wednesday 1:30-5:00

Inhalation Therapy—Thursday morning and afternoon

Neurologic Surgery—Monday with Orthopedic and Occupational Surgery and General Assembly 3:30-5:00; Tuesday section meetings morning and afternoon

Obstetrics and Gynecology—Monday, Tuesday and Wednesday afternoons; Luncheon, Wednesday; joint meeting with General Assembly 1:30-3:00 Thursday

Occupational Surgery—Joint meeting with General Assembly Monday afternoon and Tuesday morning

Ophthalmology and Otorhinolaryngology—Monday, Tuesday, and Wednesday morning and afternoon; luncheon Wednesday; Joint session for Otolaryngology Tuesday morning with General Assembly

Orthopedic Surgery—Monday 3:30-5:00 p.m., joint meeting with Neurological Surgery and General Assembly; Section meetings Tuesday and Wednesday afternoons

Plastic and Reconstructive Surgery—Tuesday morning with General Assembly; Section meetings Tuesday and Wednesday afternoons

Surgical Nurses' Section—Monday and Tuesday morning and afternoon

Urological Surgery—Monday and Tuesday afternoon; joint meeting with General Assembly, Wednesday afternoon

UNITED STATES SECTION
International College of Surgeons

THE PRESIDENT'S MESSAGE

Dr. Curtice Rosser

I must admit that I regarded the joint meeting of the two California Sections at Las Vegas in April as more or less of an experiment. Unquestionably doctors, like other people, enjoy a visit to a bizarre and stimulating spot such as Las Vegas has become. The question in my mind was whether these doctors would give proper attention to the scientific assembly in view of the competing activities surrounding them day and night. I must admit I was pleasantly surprised, not only by the excellent attendance, but by the continued interest in the presentations on the official program.

The final registration totaled more than 400 and although the meeting originally was planned primarily for California Fellows, it attained the scope of a Western Assembly. I observed that those in attendance came from Nebraska, Utah, Texas, Nevada, Colorado, Arizona, Missouri, Washington, Oregon and other states. The meetings were held at one of the newer hotels on the "Strip," The Hacienda, and the speakers included a number of authorities in surgery and its allied specialties, as described in the last issue of the Bulletin. A brilliant dinner featured the first evening and I had the pleasure of addressing the group as President of the United States Chapter. Because of the success of this Assembly, a Western Sectional Assembly is already being contemplated in Reno, Nevada, for August 1958, with our good friend Frederick M. Anderson, M.D., F.A.C.S., F.I.C.S., the Regent for Nevada, sponsoring that meeting.

The Local Arrangements Committee for the International Assembly of the International College of Surgeons to be held in Los Angeles in March 1958 also met in Las Vegas, under the General Chairmanship of Joseph de Las Reyes, M.D., F.A.C.S., F.I.C.S., the Regent for Southern California. Considerable progress was made and the College can rest assured that it will receive the enthusiastic support of the fine surgeons who make up this Committee.

I have just returned from attending the meeting of the New York Section at Lake Placid. A more beautiful vista of lake and mountains could not be found, rivaling Geneva in many ways. The attendance was very good and the program, which was under the direction of James Fleming, M.D., F.I.C.S., Max M. Simon, M.D., F.A.C.S., F.I.C.S., and the Regent for New York, Horace E. Ayres, M.D., F.A.C.S., F.I.C.S., was quite well received. Before this issue of the Bulletin is on your desk, the Eastern Section will have completed its traditional July Fourth meeting at Dixville Notch in New Hampshire near the Canadian border, and here Max Leopold Brodny, M.D., F.A.C.S., F.I.C.S., of Boston, Regent for Massachusetts, will act as Chairman of Arrangements.

At each of these meetings, it is customary for all the Regents, Vice-Regents and members of Credentials Committees who are present to gather for conference, meeting with Ross McIntire, M.D., F.A.C.S., F.I.C.S., our Executive Director, Ralph Coffee, M.D., F.A.C.S., F.I.C.S., Chairman of the Board of Regents, and such other national officers as are present. The California Section invited in a group of Committeemen from other states and conducted a "model" meeting of their Credentials Committee in Las Vegas, featuring personal interviews with applicants for membership in the College. All of us found this a very interesting and enlightening procedure. I believe that the future of the College will be greatly influenced by the interest and loyalty which our state officials are demonstrating at this time.

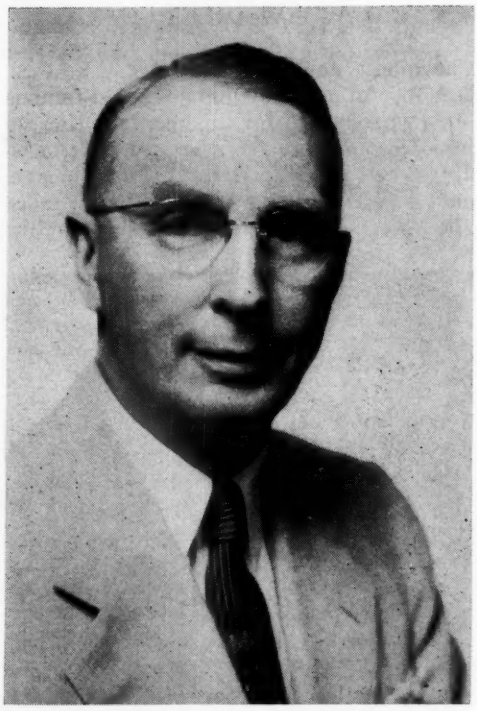
Section News

UNITED STATES

DR. GUNNAR GUNDERSEN NEW PRESIDENT-ELECT OF A.M.A.

At its recent annual meeting, the American Medical Association installed **Dr. Gunnar Gundersen,** F.A.C.S., F.I.C.S., D.A.B., as the new president-elect.

Born in La Crosse, Wis., April 6, 1897, Dr. Gundersen began the private practice of medicine in 1922 as an associate of his father, the late Dr. Adolf Gundersen, who came to this country from Norway in 1891. He now operates the Gundersen Clinic in La Crosse, along with three of his physician brothers, Sigurd B., Alf H., and Thorolf E. Gundersen. Two brothers, Dr. Trygve Gundersen and Dr. Sven M. Gundersen, are practicing in Boston and Hanover, N. H., respectively.



Dr. Gunnar Gundersen, F.A.C.S., F.I.C.S., D.A.B., president-elect of American Medical Association. (Photograph by Fabian Bachrach)

The Gundersen Clinic, which handles 3,000 to 4,000 new patients a year, was established in 1927. It receives patients from all over the United States and is operated in conjunction with the La Crosse Lutheran Hospital next door. In memory of their father, the Gundersens established the Adolf Gundersen Medical Foundation in 1945. This nonprofit organization grants fellowships to young doctors for advanced study in specialized fields, provides facilities and modern equipment for such studies, conducts investigations into the many unsolved problems of medicine and surgery, and provides free diagnostic services to indigents with complex medical problems.

Dr. Gunnar Gundersen did his prep school work in Oslo, Norway, and returned to the U.S. to obtain his B.S. degree at the University of Wisconsin in 1917, and his M.D. at Columbia University in 1920. He served his internship and residency at La Crosse Lutheran Hospital from 1920 to 1922.

Like his father and his brothers, he has been active in state and national medical affairs throughout his practice. He was president of the State Medical Society of Wisconsin for the year 1941-42, served on a number of the society's committees, and was speaker of its House of Delegates for about five years. He was a member of the A.M.A.'s House of Delegates in 1937 and 1938, and was elected to the Board of Trustees in 1948. Vice-chairman of the Board and chairman of its executive committee since 1950, he became chairman of the Board in 1955.

Dr. Gundersen's keen interest in hospital affairs and the quality of hospital service led to his election as the first chairman of the Joint Commission on Accreditation of Hospitals when it was formed in 1951. He served in that capacity until 1953.

He is past president and former member of the Wisconsin Board of Health (1943-52), and a former member of the State Board of Regents of the University of Wisconsin (1931-37).

Currently he is preceptor in charge of the medical students who come up from the University of Wisconsin to the Gundersen Clinic to augment their training by actual contact with patients and other physicians.

Dr. Gundersen is a diplomate of the American Board of Surgery, a fellow of the American College of Surgeons and the International College of Surgeons, a member of the Council of the World Medical Association, and a member of the American Public Health Association.

His principal hobbies are vegetable gardening and raising trees on his farm to preserve the beautiful forest that originally attracted him to the spot.

Dr. and Mrs. Gundersen have three children and five grandchildren. The older son, Gunnar Adolf, a graduate of Harvard Medical School and a certified radiologist, is now associated with the Gundersen Clinic in La Crosse. The younger son, Cameron B., was graduated from Boston University Medical School in 1956 and is interning in San Francisco, California. Their daughter, Mary lives with her lawyer husband in Oslo, Norway.

DR. ALLMAN PRESENTS A.M.A. AWARD

Dr. David Allman, F.A.C.S., F.I.C.S., D.A.B., new president of the American Medical Association, presented the Association's 1957 Distinguished Service Award to **Tom Spies, M.D.,** at the inaugural ceremonies in New York, June 4.

The award consists of a gold medal and citation of the doctor's services. It was granted to Dr. Spies, who is Chairman of the Department of Nutrition and Metabolism at Northwestern University Medical School, Chicago, and Director of the Nutrition Clinic at Hellman Hospital in Birmingham, Ala., for his outstanding work in eradicating tropical sprue in the south.

Selection of the award winner is made by the American Medical Association's policy-making body, the House of Delegates, from three names submitted by the Board of Trustees. These nominees are screened by the board from a long list of names proposed by the general membership.

Among the illustrious winners of the post there have been three Fellows of the International College of Surgeons: **Dr. Chevalier Jackson,** F.A.C.S., F.I.C.S., D.A.B., of Philadelphia, world-famous otolaryngologist, for his contribution to bronchoscopy (1940); the late **Dr. Anton J. Carlson,** F.I.C.S. (Hon.), of Chicago, eminent physiologist, for original studies affecting every possible phase of function

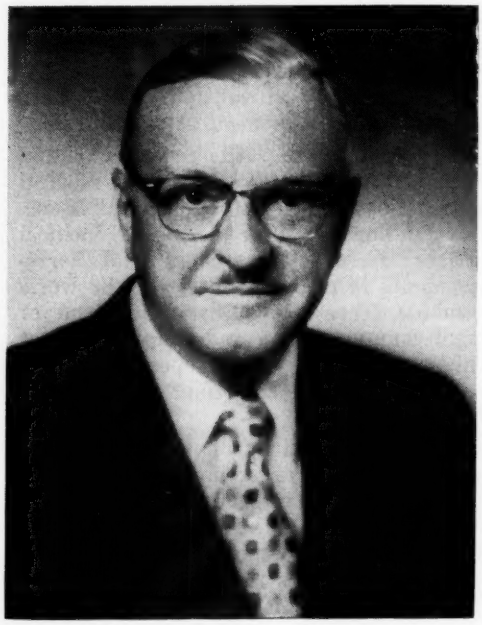
Two Fellows of the College at the high point of the A.M.A. inaugural ceremony, June 4. Dr. Gunnar Gundersen, F.A.C.S., F.I.C.S., D.A.B., new president-elect of the Association, administers the oath of office to Dr. David B. Allman, F.A.C.S., F.I.C.S., D.A.B.

in the human body (1946). **Dr. William W. Babcock,** F.A.C.S., F.I.C.S. (Hon.), D.A.B., of Philadelphia, emeritus professor of surgery and clinical surgery at Temple University, for the introduction of spinal anesthesia into the United States, for pioneer work in surgery of the thyroid gland and bone grafting, and for the design of several surgical instruments (1954).

HIGH OFFICE FOR DR. OLDFIELD

Dr. Raleigh C. Oldfield, F.A.C.S., F.I.C.S., of Oak Park, Ill., is the new president-elect of the Illinois State Medical Society. He will take office as president in May, 1958.

Born in Chicago on December 9, 1892, Dr. Oldfield studied medicine at Loyola University and received his medical degree in 1915. After interning at West Suburban Hospital, Oak Park, he joined the staff and has been affiliated with the hospital ever since. He is currently a member of the executive surgical staff and secretary of the board of trustees and the committee on nursing education.



Dr. Raleigh C. Oldfield, F.A.C.S., F.I.C.S., president-elect of Illinois State Medical Society.

Dr. Oldfield has taught surgery at Loyola University's Stritch School of Medicine for several years and has also served as instructor in the nursing school of West Suburban Hospital. Since 1925 he has been a member of the consulting staff at Westlake Hospital, Melrose Park.

Medical organization and administration have always been "a hobby," claims Dr. Oldfield. He has been a member of the Council of the Chicago Medical Society since 1926 and chairman of the Committee to Consider Informal Charges of Unethical Conduct; he organized and was the first president of the Intern-Resident Alumni Association of West Suburban Hospital; he became president of the local branch of the Chicago Medical Society (Aux Plaines) in 1930 and one year later organized the Past Presidents' Club of this group; he has been Secretary of the Journal Committee of the Illinois Medical Journal and a Council member of the Illinois Medical Society, a position he was holding when elected to his present rank; he served as a member of the Ethical Relations Committee and the Postgraduate Education Committee of the Illinois Medical Society, and as Representative in Medicine to the Department of Nurses' Registration and Education for the State of Illinois. He has held membership in numerous other medical organizations and is a Mason and a Shriner.

Dr. Edwin S. Hamilton, F.I.C.S., new chairman of the Board of Trustees of the American Medical Association.

DR. HAMILTON HEADS A.M.A. BOARD OF TRUSTEES

Dr. Edwin S. Hamilton, F.I.C.S., whose family has been associated with the medical profession in Kankakee, Ill., for more than seventy-five years, has been elected to the important post of chairman of the Board of Trustees of the American Medical Association.

Dr. Hamilton, who has been active in A.M.A. affairs for nearly twenty years, took over the chairmanship from Dr. Gunnar Gundersen, F.A.C.S., F.I.C.S., D.A.B., of La Crosse, Wis., the new A.M.A. president-elect.

He became an A.M.A. delegate from Illinois in 1938 and served in that capacity for ten years. Then he was elected to the A.M.A. Board of Trustees and has most recently been serving as secretary of the Board and of its finance and executive committees.

Dr. Hamilton also has held the important post of president of the medical examining board of the Illinois Department of Registration and Education for fourteen years.

In 1924 when the staff of St. Mary's Hospital, Kankakee, was formed, he was named chief and has held the position ever since.

VITAL NEWSMAGAZINE OF INTEREST TO DOCTORS

For most physicians, especially busy surgeons, there are not hours enough in a day to satisfy their curiosity about the rich tapestry of life beyond their world. Medicine is a world in itself for most of us, and a demanding one. That is why we can count ourselves fortunate in having a magazine created especially for us—*MD*, the new medical newsmagazine produced in New York by Dr. Felix Martí-Ibañez, editor-in-chief and publisher. In his Editor's Message of January 1957 Dr. Martí-Ibañez states that the goal of this magazine is to "satisfy *all* the needs of the physician—medical, cultural, and social." Here is a new concept in medical journalism.

The style is crisp, the research behind each article exhaustive. Leading medical authorities comprise the editorial board. Outstanding photographers and medical artists, science researchers and correspondents in medical centers of the world combine forces for a dynamic blend of good communication and graphic arts at their best. The format speeds the eye, and, if brevity is the soul of wit, both are here.

There are sections on major areas of world events. The section *World of Medicine* gives all the important medical news; *Medicine in the World,* events affecting the physician and medicine; *Medicine in the Arts* describes the contribution made by the arts to medicine, and vice versa.

The physician is seen as a man of action —artist, writer, sportsman or statesman.

He is a social and historical person. The world is observed through his eyes with unerring clarity and lack of bias.

The Journal of the International College of Surgeons is happy to extend a welcome to this bright newcomer on the publishing scene and to wish it success.

Dr. A. D. Morani President of Physicians' Art Group

Dr. Alma D. Morani, F.A.C.S., F.I.C.S., D.A.B., of Philadelphia, has been elected president of the American Physicians Art Association.

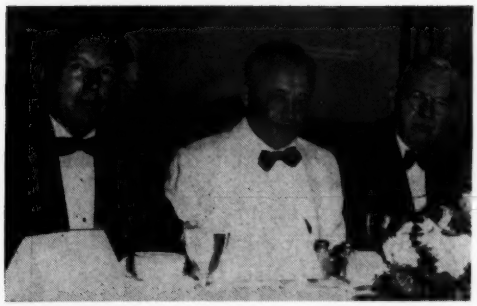
Dr. Pritikin Receives Double Appointment

Dr. Roland I. Pritikin, F.A.C.S., F.I.C.S., D.A.B., while in Shikarpur, West Pakistan, earlier this year, was named President of the Henry Holland Hospitals Alumni Association and also of the Henry Holland Mission Hospitals Fund.

Mrs. P. C. Craig President, A.M.A. Woman's Auxiliary

Mrs. Paul C. Craig of Wyomissing, Pa., wife of Dr. Paul C. Craig, F.A.C.S., F.I.C.S., D.A.B., has been elected president of the Woman's Auxiliary, American Medical Association.

In her inaugural address, June 6, she stated that the theme of the Auxiliary for the year ahead would be the concept of health as a joint endeavor. Cooperative action in a changing world and a highly developed moral sense are essential to solution of today's health problems.



Guests at the banquet of the New York State Surgical Section of the International College of Surgeons May 30 were (left to right) Dr. Ross T. McIntire, F.A.C.S., F.I.C.S., Executive Director of the International College of Surgeons; Dr. Max Michael Simon, F.A.C.S., F.I.C.S., President of the New York State Section, and Dr. Curtice Rosser, F.A.C.S., F.I.C.S., President of the United States Section.

Fellows Elected Officers In California Society of Plastic Surgeons

The California Society of Plastic Surgeons, Inc. had a successful meeting at the Santa Barbara Biltmore on April 11, 12, 13, 1957. Well over one hundred members and guests and their wives attended.

New officers for the coming year are: President, Michael Gurdin, M.D., F.I.C.S., F.A.C.S., D.A.B., Beverly Hills, Calif.; Vice-President, Gerald Gray, M.D., F.I.C.S., D.A.B., Oakland, Calif.; Secretary-Treasurer, Benjamin F. Edwards, M.D., Santa Monica, Calif., and Historian, Kathryn Stephenson, M.D., F.I.C.S., Santa Barbara, Calif.

LA PRESSE MEDICALE

La Grand Journal Français de Chirurgie et de Medicine parait chaque semaine, et donne toutes les informations scientifiques et professionelles

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INTERNATIONAL HONORS FOR TWO FELLOWS OF THE COLLEGE

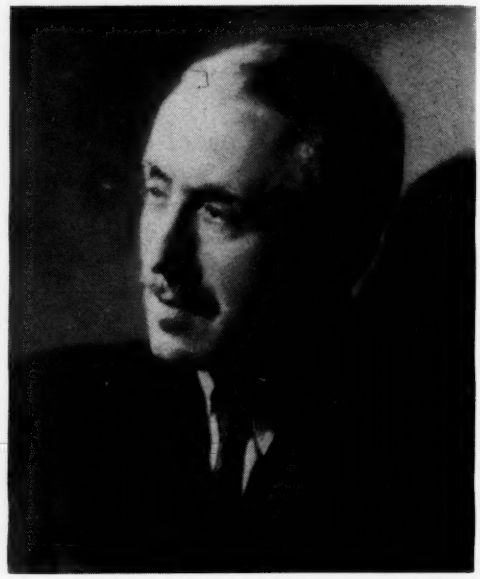
Dr. Julius Hass

Two Fellows of the International College of Surgeons have received awards of merit for outstanding work in their specialty.

Dr. Julius Hass, F.I.C.S., Consulting Orthopedic Surgeon at the Hospital for Special Surgery, New York City, was recently awarded the Ninth International Prize in Orthopedics, Provincia di Bologna —the "Umberto I" award—by the Instituto Ortopedico Rizzoli, Clinica Ortopedica Della Universita Bologna, Italy. The prize was given him for his monograph, *Congenital Dislocation of the Hip* (Charles C Thomas Publishers, Springfield, Ill., 1951).

The "Umberto I" prize, international in scope, is awarded every five years by a special commission, in memory of King Umberto I. Consisting of a gold medal and a diploma, it is bestowed on the author of the best book on orthopedics published during the preceding five years.

Dr. Hass was formerly Professor and Chief of the University Orthopedic Clinic in Vienna. He is currently engaged in research on the development of malformations in certain age groups.



Dr. Julius Hass, F.I.C.S.

Dr. Philip Thorek

Dr. Philip Thorek, F.A.C.S., F.I.C.S., D.A.B., was the only contestant from a nation outside the Continent to win the Grand Prize for a medicosurgical film awarded by La Presse Médicale of the University of Paris Medical School in April. His prize-winning film, *Atresia of the Esophagus with Tracheo-Esophageal Fistula* was in sound and color, and was directed, produced and narrated by Dr. Thorek with the help of a crew he trained in medical cinematography. Two cases were presented showing Dr. Thorek's use of the routine method of anastomosis in one patient, and his own method of anastomosis over a T-tube in the other. Both patients were two-day-old babies. The film was one year in the making, for Dr. Thorek wanted to follow up the cases and observe how well the children could ingest food.

Besides maintaining a busy practice and finding time for photography, Dr. Thorek is associate editor of the Journal and is on the faculties of the University of Illinois College of Medicine and the Cook County Graduate School of Medicine.

LECTURE IN VERSE CLOSES SERIES AT HALL OF FAME

With the unique lecture by **Dr. Chauncey Leake** of the School of Medicine, Ohio State University on May 14, the first lecture series of the School of the History

of Surgery and Related Sciences of the International College of Surgeons came to a close. Dr. Leake's topic was originally to be "The Rise of Modern Surgery," but, as he himself explained it, he chose to trace the evolution of anesthesia from prehistoric times to the present, because of a memorable childhood experience. Addressing the capacity audience that had come to hear him, Dr. Leake related how the doctor who first gave him glasses for myopia told him how he had worked with Freud, the discoverer of the uses of cocaine as a counteractant to morphine. The ophthalmologist had been experimenting in anesthesia and it was his enthusiasm that fired the young Leake's imagination.

But the impact of his lecture, its uniqueness lay in its style: it was written entirely in verse.

The audience, like all audiences attending the lecture series, was enthusiastic about the closing program.

Attendance has been high at all the lectures, reports Miss Rebecca Elam, Secretary of the Hall of Fame. Plans are now being made for next year's series.

The Hall of Fame Committee of the Woman's Auxiliary, with **Mrs. Chester Trowbridge** as chairman, has done much to promote the feeling of hospitality that adds so much to these evenings. The following members have served with her as hostesses, handling registration, during the 1956-57 season: **Mrs. Jerome Moses, Mrs. Walter Burkett, Mrs. Raymond McNealy, Mrs. Morris T. Friedell, Mrs. W. C. Bornemeier, Mrs. Charles J. Weigel,** and **Mrs. U. Grant Dailey.**

Many of the hostesses expressed their interest in the lectures and felt that "all doctor's wives should be interested in them."

DR. GUNDERSEN PRESENTS A.M.A. AWARD

The American Medical Association has awarded Parke, Davis & Company a citation "for the service it has performed to the public and to the nation through its continuing series of institutional messages published in national magazines, which accurately and dramatically tell the story of medicine and medical progress."

Dr. Gunnar Gundersen, F.I.C.S., F.A.C.S., D.A.B., of La Crosse, Wis., chairman of the A.M.A. board of trustees, presented the citation to Harry J. Loynd of Detroit, president of the pharmaceutical firm, at the June 3 opening session of the A.M.A House of Delegates.

Dr. Gundersen said, "Parke-Davis began advertising in national magazines on behalf of the medical profession in July, 1928. Since that time, the company has published 246 advertisements, nearly all of which have dealt with socio-economic and health education topics." He praised the firm for its substantial contribution to the public understanding of the medical profession.

DR. LEMPERT PERFECTS EAR OPERATION

A pioneer in fenestration of the ear has now reported breaking the last barrier to technical perfection in this procedure.

Dr. Julius Lempert, F.I.C.S. (Hon.), of the Lempert Institute of Otology, New York, reported on his final version of the operation at the 106th annual meeting of the American Medical Association, giving the honorary chairman's address before the section on laryngology, otology and rhinology, June 5.

The idea of creating a window inside the ear to restore hearing in cases of otosclerosis is about 30 years old. However, it was not until a few years ago that Dr. Lempert solved a major problem

in the fenestration procedure: prevention of closure of the new window by further bone growth after surgery.

The final problem remaining was inflammation inside the ear, a common occurrence after the surgery. He first corrected the technic to stop bleeding inside the perilymph space. This was believed to have been a major cause of the inflammation. However, inflammations still occurred.

Finally, by eliminating other possible causes, Dr. Lempert concluded that inflammation was caused by small chips of bone dislodged during the operation, and by the use of irrigation during the operation. He changed the technic to prevent both these situations, and achieved 100 per cent success in a series of 50 operations. Dr. Lempert said the final technic provides a means of permanently maintaining improved hearing, while preventing the after-effects which sometimes denied patients maximum improvement.

DR. R. A. HINGSON DESCRIBES INVENTION TO ILLINOIS STATE MEDICAL SOCIETY

Oxygen can now join the wonder drugs and other equipment carried in the physician's satchel — and it should, said **Dr. Robert A. Hingson,** F.I.C.S., D.A.B., at the 117th annual meeting of the Illinois State Medical Society in Chicago. In his address of May 21, Dr. Hingson, who is professor of anesthesia at Western Reserve University School of Medicine, Cleveland, described how the mask-type inhalator he invented with the technical assistance of a laboratory team can save life. It is of special value as a substitute for heavier equipment which may not be immediately available.

The device is used with thumb-sized cylinders of pure oxygen and can be operated with a twist of the wrist. Dr. Hingson first conceived of the need for such an instrument while recovering from pericarditis several years ago. After three years of research, the new portable midget machine was created in 1954 with the help of Western Reserve Medical students R. E. LeLievre, Kermit Newcomer and James Wismar.

Only two feet long and weighing a little more than a pound, the machine can be used as a resuscitator and inhalator. It consists of a face mask with rubber rim and positive pressure limiting valve, an aluminum central axial body with a compression spring valve, and a six-liter rubber rebreathing bag.

Its use in rescue work of all kinds, medical emergencies and surgery indicate its potential value in atomic attack, said Dr. Hingson. At Cleveland hospitals it has been used in over 5,000 anesthesias. About 3,000 machines are now in use and many are being tested by the armed services and civil defense units. They are manufactured by the Continental Hospital Industries of Cleveland.

NEW OFFICERS OF NORTHERN CALIFORNIA CHAPTER OF COLLEGE

The following new officers for the Northern California Chapter, I.C.S., were elected at the Western Section Meeting in Las Vegas, April 8-9: **Dr. Ray H.**

Kistler, F.I.C.S., F.A.C.S., 909 Hyde Street, president; **Dr. Earl Marsh,** F.A.C.S., F.I.C.S., 490 Post Street, vice-president, and **Dr. Carmelo Celestre,** F.I.C.S., 1686 Union Street, secretary-treasurer.

All are residents of San Francisco.

RECEPTION HELD AT COLLEGE FOR INTERNATIONAL VOICE CONFERENCE

On May 20-22 leading laryngologists from 27 nations attended the International Voice Conference at Thorne Hall, Northwestern University, Chicago.

On May 20, **Doctor Ross T. McIntire,** F.A.C.S., F.I.C.S. (Hon.), made the keynote address for the opening of the meeting. He stressed the importance of rehabilitation after laryngectomy. **Dr. Hans Von Leden,** F.I.C.S., was Chairman. Outstanding papers were presented by many doctors, including **Professor Dr. H. K. Kristensen,** Copenhagen, Denmark; **Dr. J. Perello,** Barcelona, Spain; **Prof. Dr. Georges Portmann,** F.I.C.S., Bordeux, France; **Prof. Dr. C. Satyanarayana,** F.I.C.S., Madras, India, and **Dr. Rolf Timcke,** Hamburg, Germany.

Also present were **Dr.** and **Mrs. Nathaniel Levin** of Miami, Florida, who have one of the world's finest schools for voice training after surgery for cancer of the larynx.

On the afternoon of May 21 there was a reception for the Conference at the College, and the foreign guests were given a tour of the International Surgeons' Hall of Fame by Miss Rebecca Elam. **Dr. Francis Lederer,** F.A.C.S., F.I.C.S., D.A.B., brought the group of visitors in his charge to the reception after he had taken them on a tour of the Illinois Eye, Ear, Nose and Throat Clinic, of which he is Director.

On seeing the exhibits in the Hall of Fame, our guests from abroad were greatly impressed with what their respective countries are doing to honor great surgeons of the past. Many expressed the hope that much more would be done.

DRS. MENDEL AND SCHOFMAN OFFICERS OF EENT SOCIETY

The Greater Miami Eye, Ear, Nose and Throat Society has elected the following officers for 1957:

President, **Dr. M. A. Schofman,** F.I.C.S.; Vice-President, **Dr. Max M. Kulvin,** and Secretary-Treasurer, **Dr. James H. Mendel, Jr.,** F.I.C.S.

Dr. Mendel informs us that the Society meets quarterly—March, May, October and December—on the second Thursday of the month.

DR. CHAMOVE ELECTED TO BOARD

Dr. Arnold S. Chamove, F.A.C.S., F.I.C.S., has been elected to the Board of Trustees of Pacific University, Forest Grove, Oregon.

Woman's Auxiliary

PRESIDENT'S MESSAGE

Our International Ambassador

Mrs. Clifton L. Dance

Our Executive Board assembled in the College Home, early on the morning of May 11, for the Board of Directors' meeting of the Woman's Auxiliary. We had a full schedule ahead — the matter of the Woman's Program in connection with the Annual Congress to be held in September at the Palmer House, coming first on the agenda.

It was, however, an unscheduled matter that claimed our immediate attention and which may prove to be of great importance in the annals of our Auxiliary. Dr. Max Thorek had come to our meeting for his customary few words. He was occupied at the time with other executive meetings and preparations for his departure for Rheims, France, in connection with the International College Surgical Tour of Europe and he had only a few short minutes to give us. It was enough, however, for his dynamic enthusiasm to catch on and to result in an on-the-spot appointment of our first International Ambassador.

Many of you know her well for she has been an active member of the Auxiliary since its inception. She has been a busy figure at every Assembly, attending to countless details of these events. She has worked "backstage," so to speak, where only a few co-workers know of her hours of labor in the various offices she has held. She is currently serving as Financial Secretary of the Woman's Auxiliary and I present her to you with great pride, our first International Ambassador, **Mrs. Jerome J. Moses,** affectionately known as Jeannette.

It was my privilege, as President, to give Mrs. Moses a letter of credentials, addressed to **Madame J. Bouvier,** the wife of **Professor Bouvier,** President of the French Section. To quote part of my letter may give you an idea of our Ambassador's duties:

"Mrs. Moses is thoroughly conversant with all phases of Auxiliary work. She will be pleased to give you any assistance you may desire in preparing an outline for the formation of an Auxiliary to your Section of the International College of Surgeons.

"We are grateful to Mrs. Moses for her willingness to defray her own expenses in order to bring this expression of friendship and interest from the members of our Auxiliary to you and the women of your country who are eligible to become Auxiliary members."

I believe that this is a far reaching step. It makes our Auxiliary truly International and, I believe, unique in the record of Women's Auxiliaries. We hope this is the beginning of the founding of Women's Auxiliaries for International College Sections all over the world. What a bond this will make among our women the world over and what an opportunity for universal understanding!

We did get back to our agenda. The September Congress promises to be an outstanding one. Our Entertainment Committee has planned an unusual program, varied and different from other years. Full information about the Congress is printed elsewhere in this issue so I shall mention only a few events.

Mrs. Thorek has graciously provided for another of her delightful "Welcoming Teas" at the College Home. She usually combines this with an original Fashion Show.

Another highlight will be a luncheon served in the patio of the Art Institute, especially for our group. This will be followed by a guided tour. Still another event, in the nature of a surprise, is in the planning stage. This will be part of a special program in the Hall of Fame for members and guests.

Our Hospitality Room at the Palmer House is the center where we meet and renew friendships—Friendship being one of our objectives. Morning coffee and afternoon tea are served, just as in your own home. We hope that you will join us. Bring your husband if he is at liberty, all are most welcome. We look forward to greeting the wives of the newly inducted Fellows and members of the College.

We are planning this year to hold the general meeting for all Auxiliary members on Tuesday morning, September 10, at 10 A.M., rather than at the end of the Congress when so many are leaving for home. A most cordial invitation is extended to all members and to everyone eligible for membership to attend this meeting and to become acquainted with what the Auxiliary, in its brief six years of existence has accomplished and what its future plans include.

You will receive a printed program when you register, giving the exact place in the Palmer House where this meeting will be held. Please plan to attend and meet your Board of Directors.

I am happy to take this opportunity to express my pleasure in having met so many of you during the recent A.M.A. Convention in New York City and to thank the Woman's Auxiliary to the Medical Society of the State of Pennsylvania for its kind invitation to your President to attend the Reception honoring **Mrs. Paul C. Craig,** President of the Woman's Auxiliary to the American Medical Association. Mrs. Craig is a charter member of our Auxiliary.

See you in Chicago, September 8-12.

—Catherine M. Dance

Correction.—In the March-April issue of the Journal Section II, p. 40, **Dr. V. G. Vaishampayan,** F.I.C.S., is cited as Secretary of the Indian Section. We are advised by **Dr. C. P. V. Menon,** F.I.C.S., that Dr. Vaishampayan is now officially Vice-President and that Dr. Menon, though President-Elect, is actually acting as Secretary to the Section. Therefore all correspondence should be directed to Dr. Menon.

Sections Abroad

AUSTRIA

The meeting of the Austrian Section of the International College of Surgeons was held at the First University Clinic of Vienna under the presidency of **Prof. Dr. L. Schönbauer** on March 19, 1957.

The following were present: **Doctors Antoine, Brücke, Bsteh, Burian, Chiari, Erlacher, Fuchsig, Gottlob, Grünberger, Halter, Hartl, Hartwich, Henninger, Heppner, Husslein, Jonas, Knaus, Knoflach, Kovascevich, Kraus, Mandl, Moritsch, Novotny, Oppolzer, Plenk, Saxl, Schlander, Schönbauer, Steindl, Stritzko, Ullik, Zaunbauer.**

Prof. Schönbauer opened the meeting with appropriate words of welcome.

1. *Report of the President.* President Schönbauer spoke feelingly on the demise of **Prof. Burghard Breitner** of Innsbruck. He reported that at the present time the Austrian Section has 67 members. The following new members were admitted: **Jonas, Kugel, Neuberger, Bablik, Dworacek, K. Huber.**

2. *Report of the Secretary.* **Prof. Mandl** reported on his sojourn in America in 1956, and stated that his visit to the Hall of Fame of the International College of Surgeons in Chicago was a revelation. He stressed the magnificence of the Hall of Fame, and he reported to those present that the Austrian Room of the Hall of Fame is one of the most beautiful rooms. He noted that those in charge regretted the absence of the stomach removed by Billroth. During the discussion it was decided that the moulage of that stomach should be ordered sent to the Hall of Fame in Chicago.

3. *Report of the Treasurer.* The Treasurer presented his report which was unanimously approved. **Steindl** and **Schlander** were elected to the Auditing Committee.

4. The report of the Treasurer was approved.

5. *Election of new Officers.* On a motion made by **Dr. Knoflach** the surgeons now in office were reelected for another term. This was unanimously approved. **Prof. Dr. L. Schönbauer,** *President;* **Prof. Dr. I. Antoine,** *Vice President;* **Prof. Dr. F. Mandl,** *Secretary,* and **Prof. Dr. R. Oppolzer,** *Treasurer.*

6. *New election.* By motion made by **Prof. Mandl** and in line with the minutes of the General Assembly of January 24, 1956, the following were placed in nomination: **Prof. Dr. P. Huber,** *Second Vice President;* **Dozent Dr. P. Fuchsig,** *Assistant Secretary,* and **Dr. A. Hartwich,** *Public Relations representative.*

These were unanimously elected. **Drs. Fuchsig** and **Hartwich** accepted the functions and **Dr. P. Huber** was written about his election.

7. Other matters were discussed at the suggestion of Prof. Mandl. Among these it was decided that the term "Chapter" be abandoned and that the word "Section" be substituted. This was approved. Other matters were discussed.

8. Report on the International Surgical Congress in 1957 to be held in Vienna. **Prof. Mandl** reported that up to the present time 38 speakers had applied. The registration fees for this Congress were set at 100 Austrian Schillings. Physicians employed full time shall not pay any registration fee. The subject matters brought to discussion will be reported. The pattern of these will be approximately those of the German Society of Surgery.

Since there was no further business to transact, the meeting was closed by Prof. Schönbauer.

POSTGRADUATE CLINICAL TOUR OFFERED IN CONNECTION WITH I.C.S. VIENNA CONGRESS

Members planning to attend the meeting of the Austrian Section, International College of Surgeons, in Vienna, October

18-20, 1927, may take advantage of this occasion to tour Europe. A well-planned itinerary includes visits to London, Paris, Geneva, the French Riviera, Rome, Capri, Florence, Venice, Vienna, Zürich and other spots along the way. Two travel methods are available: 42 days by sea, 34 days by air. The trip begins September 18, by sea, and September 22, by air.

Complete information on this clinical tour of Europe is available at International Travel Service, Inc., Palmer House, Chicago, official agent for this tour. Costs per person range from $1550 to $1870. Early reservations assure space.

Highlights of this trip will be the lectures, refresher courses, and clinical-surgical demonstrations by excellent teachers in European medical centers. There will also be ample time for rest and recreation and for sightseeing among the many beautiful spots of historic interest. Altogether, this tour offers much to members, their families and friends who might like to accompany them.

October Congress

The Congress of the Austrian, Swiss and Netherlands sections will take place in Vienna October 18-20, 1957. Headquarters will be the Billroth House in Vienna. The themes of the Congress are as follows:

1. Diseases of the Connective Tissues
2. Modern Therapy of Carcinoma
3. Errors and Safeguards in Surgical Diagnosis and Treatment
4. Bone Tumors
5. Miscellaneous subjects

In connection with this Congress there will be a Symposium relating to questions of athletic injuries and their surgical treatment. Also, there will be discussion of the establishment of a Division of Athletic Injury Surgery of the International College of Surgeons.

Those who wish information about social functions, banquets, opera and theater performances, and other events may write: Oesterreichischen Verkehrsbüro (Kongressbüro), Friedrichstrasse 7, Vienna I, Austria.

BELGIUM

The Congress of the Belgian Section, International College of Surgeons, took place at Liège, April 6 and 7.

Dr. Leopold Lambert, President of the Belgian Section, welcomed participants in an address praising the objectives of the College. It is reproduced in part here:

"The International College of Surgeons was founded in Geneva in 1935 by Dr. Max Thorek. It is a genuinely international organization, a sort of surgical United Nations. While its headquarters and the International Surgeons' Hall of Fame are in the United States, the College belongs to the world. In the heart of the Middle West, the Hall of Fame stands as a monument to the great surgeons of every nation and of every period in history. Governments of great nations have contributed funds, valuable instruments, portraits, and documents, each to its own room, so that this museum is a constant source of inspiration to visitors from all over the globe.

"The College continues to grow—with an ever increasing number of European members. A permanent administrative secretariat has been established at Geneva. In two years its responsibilities have grown to include scientific as well as administrative areas; the Secretary of the European Federation is Prof. John Henri Oltramare, Professor of Surgery and Surgical Propaedeutics at the University of Geneva.

"The broad scope of the International College of Surgeons does not place it in competition with other organizations having perhaps similar purposes. Rather, we supplement other professional groups. Ours is not only a scientific, but a humanitarian rôle. Wherever major catastrophes

have afflicted great numbers of people throughout the world—Fellows of the College have been ready with aid; they have given money, surgical supplies and their own efforts.

"We are an educational organization. Last year ten scholarships were given to young European surgeons so that they might enlarge their skills in the United States. The College also publishes a Journal which contains interesting and valuable articles and news of the membership. Thus we are all drawn closer together."

So, with words of praise from the president, the Belgian Section began its first meeting.

The first day's sessions were devoted to papers on fractures, the second day to thromboses and embolisms as seen from the surgical point of view.

Speakers in the first category and their subjects were as follows:

Prof. F. Pauwels, Director of the Orthopedic Clinic, Municipal Hospital, Aix-la-Chappelle—Biomechanical principles of the healing of fractures.

Prof. Kurt Herzog, Professor, Academy of Surgery, of Düsseldorf and chief surgeon of the Municipal Hospital of Krefeld—Prostheses in the Treatment of Recent and Old Fractures, and Pseudoarthroses of the Tibia.

Prof. Dr. Albert Duchene, Chief of the Surgical Service, Miltary Hospital of Liège—Thoughts on Diaphysary Fractures of the Tibia.

Dr. Marcel Ory, Director of the School of Physiotherapy at Liège, and **Dr. Henrard**—Presentation of Knee-Correcting Apparatus.

Dr. George Chapchal, Utrecht — Treatment of Pseudoarthrosis of the Neck of the Femur.

Dr. Paul Martin, Lausanne—Some Cases of Pseudoarthrosis Healed with the Help of Concentrated Placental Serum.

Prof. Dr. André Nicolet, Chief Surgeon of the Municipal Hospital of Tiefenau, Berne—Fractures of the Head of the Tibia.

Dr. Maurice Gielis, Liège—Fractures of the Lower Limbs.

After a discussion by **Drs. Ory, Martin, Therasse, Iselin** and **Mirallie, Prof. R. Darget,** Clinical Professor of Urology at the University of Bordeaux and Secretary-General of the French Section, presented a paper on "Anesthetic Infiltration and Surgical Section of the Pudendal Nerves in Pelvic Algias." This was supplemented by films on the subject.

"Thromboses and Embolisms, Seen from the Surgical Point of View," was the next day's subject. The president of the symposium, Prof. Jean Hamburger, of the faculty of the University of Paris, presented an introductory paper so entitled. There followed addresses by:

Dr. Jean Stalport, Chief Surgeon at the Hospital of Huy—"Surgical Treatment of Phlebitis of the Lower Limbs."

Dr. Jean Baumgartner of Geneva—"Thrombectomy in Acute Phlebitis of the Lower Limbs: Indications and Long-Term Results."

Drs. Georges and **Leopold Lambert,** Surgeons at the Leonard Merlot Medical and Surgical Institute, Seraing—"Urgent Embolectomies in the Femoral Artery."

Dr. Lucien Diamant-Berger, of the Society of Surgeons of Paris—"Premature Ambulation and Sudden Death After Operation."

Dr. R. Fischer, of Geneva—Thromboses and Embolisms.

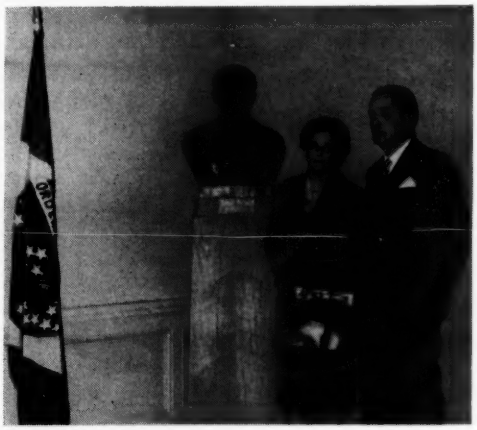
BRAZIL

DR. CARVALHO'S DAUGHTER VISITS HALL OF FAME FOR FIRST TIME

A distinguished visitor to the International Surgeons' Hall of Fame on May 2, was Signora Alice Vierra de Carvalho Mesquita, daughter of the famed Dr. Arnaldo Vierra Carvalho (1867-1920), surgeon and founder of the São Paulo School of Medicine in Brazil.

Signora Mesquita, accompanied by her husband, Francisco Mesquita, had interrupted her journey to New York to pay a special visit—her first—to the Brazil Room of the Hall of Fame. It was a pilgrimage, for in this room the Brazilian Government had paid tribute to her father's memory through the medium of art. Two noted countrymen of Dr. Carvalho have immortalized him—R. Galvez by a bronze bust and Wiltschul A. Zavella by a sketch that depicts Dr. Carvalho performing an operation. In a place of honor, too, is the marble desk set that belonged to the elder Carvalho, which Signora Mesquita brought to the United States as a gift to the Hall of Fame.

The daughter of a great surgeon was moved to murmur "Wonderful," as she looked about the room filled with many objects of scientific and human interest. It was the adjective she chose for the Hall of Fame in toto. The Mesquitas left us with the promise that they will come back again for another memorable visit. We hope so.



In the Hall of Fame's Brazil Room, Signor and Signora Mesquita pause reflectively before a bust of Dr. Carvalho.

HISTORICAL NOTE

The characteristic features of surgery in the United States during the period from 1775 to 1900 were its vigorous growth in surgery of blood vessels, bones, joints, vermiform appendix, ovary and vagina and in anesthesia. The discoveries of Pasteur, Lister, Virchow, and Ehrlich in the latter half of the nineteenth century. Constantly moved forward by intensive research, surgery has developed from a mere trade to a magnificent science. It is indebted to no one country nor to any single century. All peoples at all times have made it what it is.

CANADA

The Canadian Section of the International College of Surgeons heard **Dr. Nicholas J. Eastman,** Professor of Obstetrics at Johns Hopkins University, in an address given at the Auditorium of the Jewish General Hospital, Montreal, Quebec, Canada. His topic was "Apnea Neonatorum."

IMPORTANT NOTICE TO ALL PARTICIPANTS IN CONGRESSES AND REGIONAL MEETINGS

Those desiring their Congress presentations to appear later as articles in the **Journal of the International College of Surgeons,** please note:

1. **A full copy of the manuscript, together with all illustrations, legends, tabular matter and bibliographic references,** should be sent DIRECT to the Editorial Office, Journal of the International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois. Manuscripts so submitted will be promptly acknowledged and, on acceptance by the Editorial Board, published as soon after the Congress as possible. The Journal **cannot be held responsible for loss, failure of acknowledgment, delay in publication or nonpublication of any manuscript, or any subsidiary material appertaining thereto, which has not been submitted through the official editorial channels.**

2. Manuscripts may be submitted in advance of the Congress if desired. When this is done, they should be **plainly marked with the name, place and date of the Congress or Meeting concerned,** to guard against premature publication.

3. Manuscripts delivered in person to Congress officials or others **for press reportorial use only** should be sent by the recipient to the Public Relations Bureau.

4. If illustrations are desired and it is impossible to submit them at the time the manuscript is submitted, the notation "Illustrations to come" should accompany the latter; otherwise the article may be scheduled for publication before the illustrations have arrived.

These requests are made not only to safeguard the Journal from error but in the best interests of our contributors. To make sure of prompt acknowledgment and efficient handling of your Congress presentation, please send it DIRECT to its ultimate destination!

GERMANY AND GREECE

A joint meeting of the Greek and German Sections of the International College of Surgeons was held in Athens, April 27-30, 1957, under the auspices of Her Majesty, Queen Frederika of Greece. It took place at "Alexandra," the State and University Gynecological Clinic. Prof. Dr. N. Louros, F.I.C.S. (Hon.), President of the Greek Section, was Director.

The program was as follows:

Saturday, April 27

9:00 a.m. Visit to the Clinic

10:30 a.m. Visit to:

(a) Army Veterans Hospital
Director: **Surgeon General Dr. I. Kyriakis**

(b) Gynecological Clinic and Midwife School "Marika Iliadi" (Venizelos Foundation)
Director of First Clinic, **Associate Prof. Dr. L. Kyriakis**; Director of Second Clinic, **Dr. C. Petsoposulos**

(c) Cancer Institute

(d) Baby Clinic "Mitera"

(e) Research Center of the Maternity Clinic

1:30 p.m. Lunch at the Royal Yachting Club (by invitation of the President of the Greek Section of the International College of Surgeons)

3:00 p.m. Sightseeing tour in the city

7:30 p.m. Reception of the members of the Greek Section at the Grande Bretagne Hotel
(by invitation of the Ciba company)
Dinner (optional)

Sunday, April 28

8:00 a.m. Leaving for Delphi. Return at

Scene at one of the round table discussions held on April 29 and 30 as part of Greek-German Section meeting.

night (by invitation of the Hoechst and Bayer companies)

Monday, April 29

8:00 a.m. Operations: abdominal radical operation for cervical carcinoma; conservative myomectomy; Kielland's operation for uterine prolapse; operation for carcinoma of the vulva (special personal technics)

10:30 a.m. Sightseeing at the Acropolis

1:30 p.m. Lunch at the Asteria Restaurant on the shore (by invitation of the Schering company)

6:00-8:00 p.m. Round table discussion of gynecologic topics, in the presence of the medical staff of the clinic and of the gynecologists of the Greek Section

9:00 p.m. Dinner at the home of Prof. Louros

Tuesday, April 30

8:00 a.m. Operations

10:00-12:00 Visit to the National Museum

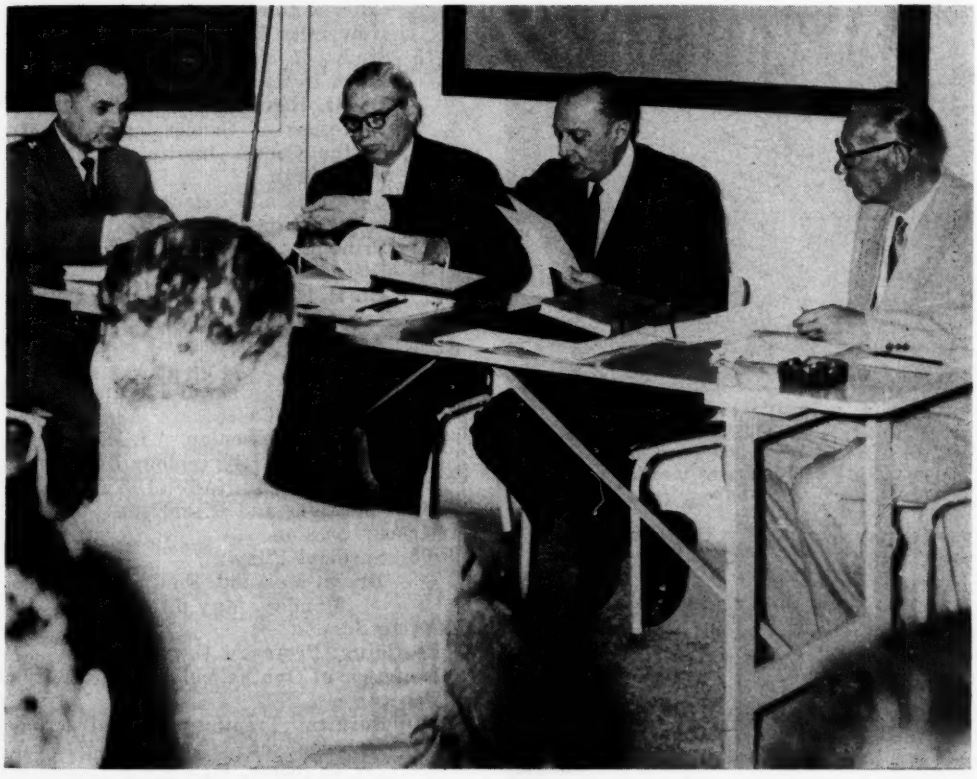
1:30 p.m. Lunch at the invitation of the members of the Greek Section

6:00-8:00 p.m. Round table discussion of gynecologic topics (see also Monday)
Dinner (optional)

Officers of the Greek Section are as follows: **Prof. Dr. N. Louros,** F.I.C.S. (Hon.), *President;* **Prof. Dr. J. Charamis,** F.I.C.S., *Vice President;* **Prof. Dr. N. Christeas,** F.I.C.S., *Secretary General;* **Prof. Dr. H. Toul,** F.I.C.S., *Treasurer;* **Prof. Dr. G. Karayannopoulos,** F.I.C.S., *Member;* **Prof. Dr. Th. Demetriades,** F.I.C.S., *Member;* **Associate Professor Z. Kairis,** F.I.C.S., *Member;* **Lecturer Dr. B. Coutifaris,** F.I.C.S., *Member.*

Participants in Greek-German Section meeting take luncheon at Daphni.

Guests and participants at the joint meeting of the Greek and German Sections.



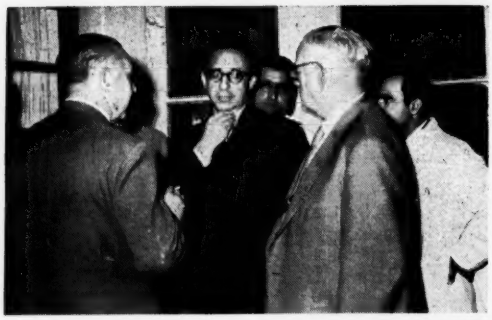
Round table discussion at meeting of Greek and German Sections. Left to right, Prof. Emmrich, Magdeburg, Germany; Prof. von Mikulicz-Radecki, Chairman of the Gynecological Section, Berlin, Germany; Prof. Louros, of Athens, Greece, President of the Greek Section; Prof. Schubert of Hamburg, Germany.

IRAN

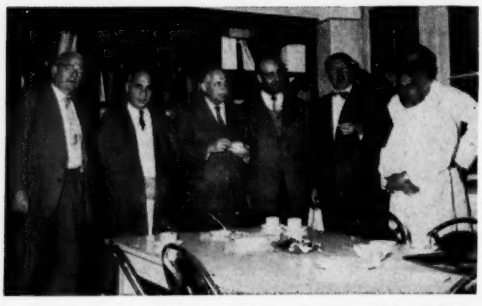
During the past few months several changes have been made in the Iranian government: **Dr. J. H. Saleh,** F.I.C.S., is no longer Minister of Health. That position is now held by **Dr. A. Raji,** F.I.C.S. **Dr. A. Farhad,** F.I.C.S., has become president of the University of Teheran, and **Dr. Eghbal,** former president of the University is now Prime Minister of Iran.

The Second National Congress of the International College of Surgeons, Iranian Section, took place May 5-8 at Avicenna Hall, School of Medicine, University of Teheran. Dr. A. Farhad, the new president of this section, gave his inauguration address on the morning of the first day.

The complete program appears opposite.



Prof. Dr. A. Farhad, F.I.C.S., President of the University of Teheran, in center, converses with Prof. Dr. A. W. Fischer, President of the German Section (right) and others at meeting of Iranian Section.



German and Iranian professors pause for coffee.

Sunday, May 5, 1957

Morning Session

Presiding: **Dr. Said-Malek,** F.I.C.S. (Hon.) Professor of Urology, University of Teheran

8:30 Inauguration Address:
Dr. A. Farhad, F.I.C.S.
President of the University of Teheran; Professor of Radiology, University of Teheran

8:45 Annual Report of the Section:
Dr. E. Hazrati, Major, M.C., F.I.C.S.
Secretary of the Iranian Section of the International College of Surgeons

9:00 Several Points in the Surgical Treatment of Ureteral Calculi:
Dr. M. Pezechcan, F.I.C.S.
Chief of the Urology Section, Pahlavi University Hospital, Teheran

9:15 Study of a Case of Neuro-Epithelioma In Sacral Area:
Dr. H. Rahmatian, F.I.C.S.
Professor of Cancerology; Director of the Cancer Institute, University of Teheran

9:40 Questions and Discussion:

9:55 Intermission:

10:10 Principles in Treatment of Malignant Diseases:
Dr. H. Hashemian, B.S., M.R.C.S., L.R.C.P., F.R.C.S., F.I.C.S.
Associate Professor of Surgery, University of Teheran

10:50 Female Uro-Genital Fistulae, Report of Eighty Cases:
Dr. M. Mohssenian, A.I.C.S.
Chief of the Gynecology Department, Firouz-Abadi Hospital, Teheran

11:30 Questions and Discussion:

Afternoon Session

3:00 Surgical Films:
Dr. M. Massoud, F.I.C.S., in charge.

Monday, May 6, 1957

Morning Session:

Presiding: **Professor G. Shams**
Professor of Ophthalmology, University of Teheran

8:30 Surgical Treatment of Intracranial Tuberculoma:
Dr. E. Samiy, F.I.C.S.
Chief of The Department of Neuro-Ophthalmology, University of Teheran

9:15 Surgical Treatment of Intramedullary Abscess:
Dr. N. Ameli, F.R.C.S., F.I.C.S.
Chief of the Department of Neuro-Surgery, University of Teheran

9:35 Fracture of the Head and Neck of Femur:
Dr. M. Massoud, F.I.C.S.
Orthopedic Surgeon, Teheran

10:05 Questions and Discussion:

10:20 Intermission:

10:35 Thrombophlebitis:
Dr. D. Heyate, A.I.C.S.
Chief Surgeon, Heydayat and Dadgostari Hospital, Teheran

11:15 Daily Mistakes in Surgery and Anesthesiology:
Dr. A. Farr, F.I.C.S.
Associate Professor of Anesthesiology, University of Teheran

11:45 Questions and Discussion:

Afternoon Session

3:00 Surgical Films:
Dr. M. Massoud, F.I.C.S., in charge.

Tuesday, May 7, 1957

Morning Session

Presiding: **Dr. M. A. Sadr,** F.I.C.S., President-Elect of the Iranian Section of the International College of Surgeons; Director of the Mehr Hospital; Consulting Surgeon of the Bank Melli Hospital, Teheran

8:30 Surgical Treatment of Bilateral Pulmonary Tuberculosis:
Dr. A. Chaky, A.I.C.S.
Chief of the Surgical Department, Abou-Hossein Hospital, Teheran

9:05 Surgical Treatment of Aortic Stenosis:
Dr. D. Kazemi, A.I.C.S.
Thoracic Surgeon, Teheran

9:40 Ligation of Inferior Vena Cava in Heart Failure:
Dr. T. Milani, F.I.C.S.
Surgeon, Bank Melli Hospital, Teheran

10:00 Questions and Discussions:

10:15 Intermission:

10:30 Surgery on Mitral Valves:
Dr. J. Mir-Ala, A.I.C.S.
Associate Professor of Cardiology, University of Teheran

11:10 Dissecting Aneurysm of Aorta, Report of a Case:
Dr. J. Nouri, A.I.C.S.
Surgeon, Nemazee Hospital, Shiraz

11:40 Questions and Discussion:

Afternoon Session

3:00 Surgical Films:
Dr. M. Massoud, F.I.C.S., in charge.

Wednesday, May 8, 1957

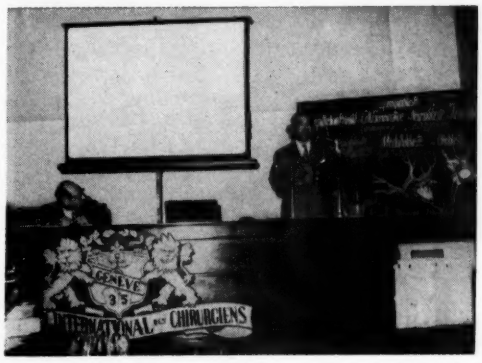
Morning Session

Presiding: **Dr. H. Hanjan**
Professor of Surgery, University of Teheran

8:30 Esophageal Cardiospasm:
Dr. J. Vossoughi, F.I.C.S.
Chief of the Surgical Department, Pahlavi University Hospital, Teheran

8:50 Spontaneous Rupture of the Esophagus, Report of a Case:
Dr. J. R. Weber, Capt. M.C. (U.S.A.), Chief of the Surgical Department, U.S. Army Hospital, Teheran

Members of Iranian Section listen intently to Dr. Farhad's inauguration address at their Second National Congress, May 5-8.



Dr. H. Rahmatian, F.I.C.S., speaks before the Second Iranian Congress. Seated at left is Dr. Said-Malek, F.I.C.S. (Hon.), president of the first session.

9:05 Translation of Dr. Weber's speech:

9:15 A New Study in Intestinal Obstruction:
Dr. C. Amine, F.I.C.S.
President of the University of Tabriz, Professor of Surgery, School of Medicine, University of Tabriz

9:35 Questions and Discussion:

9:50 Intermission:

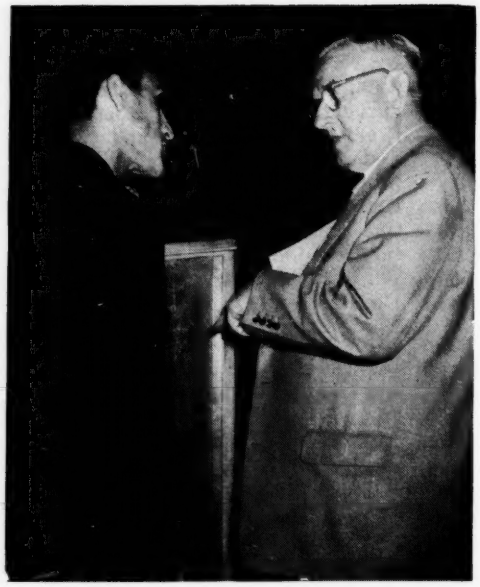
10:05 Principles in Harelip Surgery:
Dr. E. Hazrati, F.I.C.S.
Chief of the Plastic and Maxillo-Facial Surgery Service, Army Hospital No. 1, Teheran

10:40 Historical Medical Sessions and Congresses in Iran:
Dr. M. Nadjm-Abadi

11:10 Questions and Discussion:

Afternoon Session

3:00 Surgical Films:
Dr. M. Massoud, F.I.C.S., in charge.



Dr. Hazrati and Prof. Dr. Fischer in an informal conference.

The Inauguration Address by Dr. A. Farhad, F.I.C.S., President of the University of Teheran, at the Second National Congress of the International College of Surgeons, Iranian Section, May 5-8, 1957. Seated is Dr. Said-Malek, F.I.C.S. (Hon.), president of the first session.

An absorbing moment in the inauguration address at the Second National Congress, Iranian Section.

A banquet was held in the University Club at 8:00 p.m., Thursday, May 9, for physicians and their wives.

Prof. Dr. A. W. Fischer, F.I.C.S., President of the German Section, and a group

of five noted German physicians and surgeons were invited to the University of Teheran by the University of Teheran School of Medicine. In the group were **Prof. Drs. Fischer, Derra, Junghanns, Kalk, H. Kirchhoff,** F.I.C.S., and **Parad.** They arrived in Teheran on April 1, 1957, and remained until April 20. During this period they delivered many outstanding lectures on medicine and surgery. Prof. Fischer's several lectures on surgery of the biliary tract, colon and rectum, presented much new information to Iranian surgeons. He attended the April Scientific Session of the Iranian Section of the I.C.S.

PERU

First Central Peru Regional Medical Congress to be Held

The "Daniel A. Carrión" Peruvian Medical Association is organizing the First Central Peru Regional Medical Congress in commemoration of the centenary of the birth of Daniel Alcides Carrión, eminent figure in Peruvian medicine. The Congress will be international in character. It will take place in Lima, August 11-17, 1957. Among other topics, the program will include a presentation on "La Verruga Peruana," which can be loosely translated as the Peruvian wart disease. Carrión, a medical student born in 1859, inoculated himself with the microbe now known as *Bartonella bacilliformis,* obtained from the nodule of a man ill with the Peruvian wart disease. Carrión died of Oroyan fever in 1885. From this fact it was deduced that the Peruvian wart and Oroyan fever were different stages of the same illness.

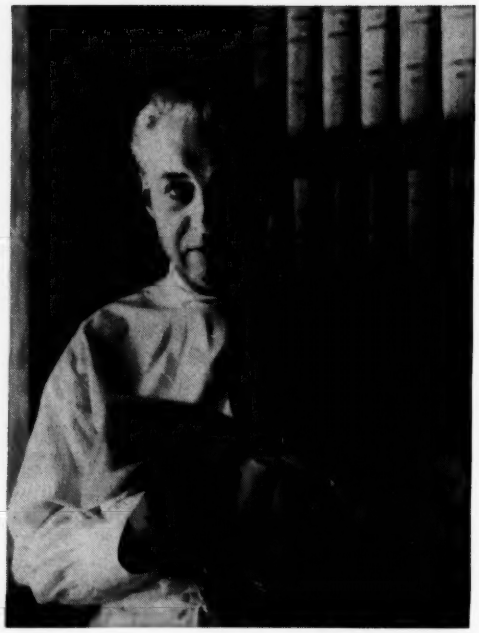
Prof. Dr. Juan S. Netto, F.I.C.S., president of the Peruvian Section of the International College of Surgeons, was recently elected president of the Paraguayan-American Cultural Center, and vice-president of the Paraguayan Circle of Medicine.

SWITZERLAND

At its meeting in Bern on March 30, 1957, the Swiss Section elected the following committee for 1957-1959: *President,* **Dr. A. Nicolet,** F.I.C.S., Alpeneggstrasse 1, Bern; *President-Elect,* **Dr. E. Kaiser,** F.I.C.S., Chief Surgeon at Stadspital Waid, Tièchestrasse 99, Zürich; *First Vice President,* **Prof. J. H. Oltramare,** F.I.C.S., Secretary General for Europe, International College of Surgeons; Member of the Board of Trustees, 16, rue de Candolle, Genève; *Second Vice President,* **Dr. W. Hess,** F.I.C.S., Associate Surgeon at the University of Clinical Surgery, Bürgerspital Benkenstrasse 79, Basel; *Third Vice President,* **Dr. L. De Preux,** F.I.C.S., Route de Lausanne, Sion; *Secretary,* **Dr. M. Coquoz,** F.I.C.S., 1 rue du Château, Vevey; *Treasurer,* **Dr. P. Martin,** F.I.C.S., 2, Montbenon, Lausanne. **Prof. R. Nissen,** F.I.C.S. (Hon.) was appointed a member of the Board of Trustees.

Professor Dr. J. H. Oltramare

Prof. Dr. J. H. Oltramare, F.I.C.S., the Honorary Regional Secretary for Europe and Vice-President of the Swiss Section, International College of Surgeons, was born in Geneva on September 16, 1891. The descendant of a Genoese family that had taken refuge in Geneva at the time of the Reformation, he spent his youth in Argentina, where his father practiced medicine. After studying medicine in



Dr. J. H. Oltramare, F.I.C.S.

Geneva, Lyons and Paris, he took his medical degree in both the Universities of Lyons and Geneva and a degree of doctor of science at the University of Lyons.

For several years he practiced medicine in France. Then he became Chief of Service at the University Hospital of Geneva. As *chirurgien-adjoint* he taught clinical surgery and held the rank of deputy professor. The Faculty of Medicine at the University of Geneva then elected him professor of surgical propedeutics.

Dr. Oltramare is an honorary member of the Académie de Chirurgie of Paris and a member of various scientific associations.

As regional director of the newly formed European Federation of The International College of Surgeons, he will add honors to those already acquired in his active career. Nations comprising the new European Federation will participate in continental meetings supplementing the biennial congresses of the College, and they will do so under the able leadership of Dr. Oltramare.

THAILAND

The midyear meeting of the Thai Section took place at the Pathological Institute of the Army Medical Headquarters in Bangkok, on May 23, 1957.

After registration and an official greeting by Major General Tanom Upathumpanuna, Chief of the Army Medical Corps, there was an opening speech by the President of the Thai Section, **Air Vice Marshal Chua Punsoni,** R.T.A.F. (MC), M.D., F.I.C.S., in which he expressed appreciation to the Army Medical Corps.

There followed a group of papers presented by foremost surgeons. These were as follows: "Mucoid Carcinoma of the Colon," by **Maj. Gen. Sanguan Rojanawongse,** R.T. Army (MC), M.D., D. Sc. Med., F.I.C.S.; "Superior Mesenteric Vessel Thrombosis," by **Col. Salya Sobiya,** R. T. Army (MC), M.D., F.I.C.S.,; "Jump Injuries of Thai Paratroopers," by **Capt. Vichian Sritavin,** M.D., **Capt. Umphorn Chonmitri,** M.D. and **Col. Thip Pholpoke,** R.T. Army (MC), M.D., F.I.C.S., F.A.C.P.; "A Ten Years' Work on Physical Therapy in the Royal Thai Army Medical Service with Emphasis on Surgical Cases," by **Col. Praderm Pechaporn,** R.T. Army (MC), M.D., F.I.C.S.; "Hemipelvectomy," by **Pisit Vichejgul,** M.D., F.A.C.S.; "Intestinal Obstruction in Children and Newborn," by **Sanor Intrasooksri,** M.D.

After lunch, which was provided by the Royal Thai Army, there was a demonstration of the evacuation of sick soldiers from the battle field by the school of the Army Medical Corps.

Sem Pring-puang-geo, M.D., F.I.C.S., is secretary of the Thai Section.

Medical News Front

W.M.A. REPRESENTED AT WORLD HEALTH ASSEMBLY

The World Medical Association, representing 700,000 doctors of the world, had a delegation at the 10th World Health Assembly in Geneva, Switzerland on May 7, 1957. This delegation was headed by **Dr. Jean Maystre,** Official Liaison Officer of The World Medical Association to the World Health Organization. **Dr. Louis H. Bauer,** Secretary General of the Association, and **Dr. Rolf Schloegell,** Secretary of its Social Security Committee, were members of the delegation during the opening week of the Assembly.

At the Technical Discussion of the Health Assembly the Council of The World Medical Association presented the topic, "The Role of the Hospital in the Public Health Programme."

A Council committee of The World Medical Association read a paper entitled "The Practicing Doctor's Evaluation of the Role of the Hospital in the Public Health Program" which has been transmitted to the World Health Organization. This document stresses the following points: Health care requires a team approach—the team to be composed of doctors, dentists and their ancillary personnel as well as professional organizations, voluntary and official health agencies, social welfare agencies and government; the public comes first; the general practitioner is the doctor best qualified to offer continuity of health care and should have free access to hospital facilities for this purpose as well as for improvement of his skills; a hospital is a social as well as scientific institution, thus hospital care should not be impersonal; its staff determines the reputation of a hospital; doctors cannot practice modern scientific medicine without hospitals. An important question to be answered is: *Who* shall determine how medicine is to be practiced both in hospitals and elsewhere?

Cancer is "vulnerable" and already is "yielding here and there" to those who are fighting it, according to an opinion expressed by **Dr. John R. Heller,** Director of the National Cancer Institute, Public Health Service, Department of Health, Education and Welfare, in a paper presented before the 23rd annual meeting of the American College of Chest Physicians in New York City, May 30, 1957.

While radiation and surgery remain the only established and accepted methods for controlling or curing cancer, Dr. Heller expressed the belief that "Chemotherapy is one of the most active and promising areas in cancer research today." Chemotherapy is defined as treatment by chemicals.

"Cooperative effort" in research was given the principal credit by Dr. Heller for the headway made against cancer, which is man's second disease enemy, being exceeded only by heart disease in number of deaths caused.

New and refined research techniques and instruments developed rapidly by this cooperative effort since World War II have begun to produce important results in fighting cancer, Dr. Heller continued.

"These include," he said, "supervoltage generators, radioisotopes, the electron microscope, and other electronic devices, inbred strains of mice, tissue culture, chromatography, mass spectrograph, and, most recently, an ultraviolet television camera-microscope, to name just a few.

"In addition, development of the new concept of molecular biology has brought the precise techniques of biochemistry to the characterization of cell processes in terms of molecules and their chemical interactions.

"Cancer research," Dr. Heller noted, "is financed by cooperative funds, coordinated

by cooperating organizations, and performed by cooperating skills. In fact it is not science in itself, but the simultaneous activity of many independent scientific disciplines.

"The variety of recent achievements," he said, "illustrates eloquently the nature of cancer research.

"These include," he continues, "the suppression of a solid malignant tumor by drug treatment; application of cytology to detect early cancer of the uterine cervix; 'training' of a virus to destroy human cancer growing in rats; observation of a possible relationship between the factors involved in infection and cancer; development of a vaccine that protects mice against leukemia; and establishment of a statistical association between cigarette smoking and lung cancer.

"Our outlook for the future is optimistic. All the factors involved in organizing and carrying on cancer research have combined synergistically to produce a great, sustained effort which is only beginning to reach its full stride.

"Research activity in the United States and England has produced about two dozen chemotherapeutic agents in the last few years," Dr. Heller reported.

"These compounds are useful temporarily in alleviating symptoms and in many cases prolonging the useful life of patients suffering from about 15 types of cancer, including leukemia, Hodgkin's disease, and advanced cancers of the breast and prostate gland. The compounds include adrenal steroids and ACTH, antimetabolites, alkylating agents, radioactive isotopes, hormonal alterants, and cell poisons. The majority of these were developed within the last decade; some of them are nitrogen mustards, methotrexate, aminopterin, 6-mercaptopurine, myleran, CB-1348, and azaserine."

Relieve Penicillin Reactions

Relief from adverse penicillin reactions, estimated to affect a minimum of 600,000 persons annually, may be available before the end of this year.

Two Midwest physicians, in papers presented at the recent American Medical Association convention, reported highly successful results in the treatment of penicillin reactions by the injection of a newly developed penicillinase. **Capt. G. M. Davis,** Medical Corps, U.S. Navy, of Great Lakes Naval Training Station, and **Dr. R. M. Becker** of Madison, Wis., each reported that, in a significant number of clinical tests, allergic manifestations of penicillin reactions promptly receded following the injection of penicillinase.

Dramatic relief occurred within a period ranging from a few hours up to twenty-four hours and most patients had complete freedom from itching and swelling in twenty-four to seventy-two hours, they reported. An additional advantage of the new therapy is the absence of recurrence of symptoms even when other supportive therapy is stopped.

World Medical Association Code and Emblem Protect Civilian Doctors in War

Since the objectives of the World Medical Association are "to maintain the honour and protect the interests of the medical profession" and "to assist all peoples of the world to attain the highest possible level of health," the organization has adopted an emblem and a Code of Medical Ethics to be used by civilian doctors, their ancillaries and the staffs of installations for civil defense. The intent is to protect such personnel in time of war.

The Code and emblem were recommended by a joint committee made up of representatives of the International Committee of the Red Cross, the International Committee on Military Medicine and Pharmacy and the World Medical Association, the World Health Organization providing an Observer. Adoption by the member associations, legislative enactments in each country and recognition of the emblem at the international level to insure complete protection are now being implemented.

The medical ethics of the Code are identical to those used in time of peace.

SKIN GRAFTS POINT TO ORGAN REPLACEMENTS

The transfer of skin or body organs from one person to another to replace diseased or damaged parts, a long-sought dream of medical men, is a little nearer realization.

Research at the University of California at Los Angeles Medical School has demonstrated that tissue from one animal may adapt itself to that of another under certain conditions.

The studies were carried out by Drs. Jack Cannon, Paul Terasaki and William Longmire.

Skin from day-old chicks can be successfully cross-grafted. But when the chicks mature, grafts involving their "former skin" will not take. This suggests that the donor skin has adapted itself, becoming specific to the host.

The experiments further indicate that tissue specificity may be a function of the immune mechanism, Until the immune mechanism is fully functioning, this specificity may not exist.

Since the major research emphasis to date has been on making the host tolerant to the graft, the investigators recommend additional research on the possibility of tissue adaptation to the host.

EYE OPERATION RESULTS WEIGHED

At the recent annual meeting of the A.M.A., two Philadelphia physicians reported results of 115 eye operations in which a plastic lens was substituted for a removed lens damaged by cataract. Patients ranged in age from 12 to 80. Most of them did well, needing no glasses for distant and near vision.

Drs. Warren S. Reese and Turgut N. Hamdi said the operation, devised in 1949 by Mr. Harold Ridley, London surgeon, has been performed by only a few American ophthalmic surgeons.

In the operation, the cataractous lens is removed and a plastic lens inserted through the pupil and held in position by the iris. This permits the patient to wear ordinary correcting eye glasses instead of the heavy lens necessary following the conventional cataract removal operation.

Complications were minimal and not serious.

The doctors stated that the Ridley operation should preferably be used when only one eye has a cataract, so that after operation both eyes can be used together. Traumatic or injury cataracts and those in young people are more difficult to manage and the prognosis is less favorable.

INTERNATIONAL CONFERENCE OF ULTRASONICS IN MEDICINE TO BE HELD

The International Conference sponsored by the American Institute of Ultrasonics in Medicine, will take place at the Statler Hotel, Los Angeles, California, September 6-7, 1957. For information, write John H. Aldes, M.D., Secretary, 4833 Fountain Avenue, Los Angeles 29, California.

The meeting will cover the biological and physiological principles, as well as the clinical aspects of ultrasonics in medicine. There will also be a round table conference covering all these phases. Participating in the meeting will be representatives from Europe, South America and Japan.

NEW OPERATION SAVES SIGHT

A tube which usually empties fluid into the mouth was detoured into the eye in an unusual operation on a 24-year-old man, whose diseased eyes no longer received moisture from the tear ducts.

The operation, first of its kind reported in this country, was devised and performed by **Drs. James E. Bennett** and **Arby L. Bailey,** Crile Veterans Administration Hospital, Cleveland. They described it at the 106th annual meeting of the American Medical Association.

They said they also performed a second operation to correct the patient's only post-operative complaint; the fluid duct continued to behave as if it were connected with the mouth, so that eating caused an overflow of fluid from the eye.

Because of the success of the operations on the left eye, the physicians now plan similar surgery on the damaged right eye.

The patient was suffering from xerophthalmia, a painful condition in which the lower lid was inflamed, the cornea became ulcerated, and the tear ducts provided no fluid, causing the eye to be dry and lusterless. The patient had been progressing steadily toward blindness for about 18 months before operation.

Acting on sketchy reports of an idea for surgery suggested by Russian and Chinese physicians, the Cleveland doctors experimented with dogs and worked out a procedure which was successful.

In November, 1956, they operated on the patient. They transferred a section of the parotid duct to the inside of the lower eyelid, connecting it with an opening made there. To reach the duct, the physicians made an incision in the cheek, which left a small scar; no scar appears on the eye.

The patient was immediately relieved of pain, and his other symptoms began to clear. Later, however, he complained of excess fluid, especially during meals. Because of the original disease, the patient had no drainage from the eye, so the fluid overflowed.

The physicians operated again, inserting a polyethylene tube to serve as a drainage duct from the eye into the nose. This operation also was successful, and the patient's vision has improved.

The physicians said the parotid fluid is very similar to tears and cannot hurt the eye. They also said that other glands provide enough fluid to the mouth for normal conditions, even though the parotid duct is removed.

Edouard Chassaing Honored

Mr. Edouard Chassaing, Professor of Sculpture at the Art Institute of Chicago has received an honor award for 1957 from the Chicago Chapter of the American Institute of Architects, and the Chicago Association of Commerce and Industry for superior sculpture in the International College of Surgeons' Hall of Fame, and for his excellence in the Fine Arts allied with architecture.

Researchers Report on Hypothermia

U. S. Department of Health, Education and Welfare announces that the use by surgeons of hypothermia, or "refrigerated sleep," to suspend the work of the heart for repairs may be safer in the future with the application of new research results obtained by Public Health Service scientists.

Drs. Thomas A. Lombardo, Leo R. Radigan and Andrew G. Morrow of the U. S. Public Health Service's National Heart Institute of the National Institutes of Health at Bethesda, Maryland, have found in animal experiments that the threat of cardiac muscle failure in such operations can be greatly reduced by injections of strophanthidin, a digitalis-like "heart tonic" from the seeds of the African shrub Strophanthus. A description of the experimental technic appeared in the January 1957 issue of *Circulation*.

Hypothermia permits many otherwise impossible cardiac operations because, by lowering body temperature 12 degrees below normal (in an ice bath), it reduces the needs of most body tissues for blood-borne oxygen. This allows the surgeon eight to ten minutes to clamp off the flow of blood through the heart's chambers and work inside.

Apparently failure of the cardiac muscle sometimes occurs because the heart needs a continuous oxygen supply more than do other body tissues. Even in the chill of hypothermia the heart soon weakens in the absence of blood; therefore, when the surgeon restores the flow, the muscle may be flabby and fail to perform its pumping job effectively.

New Test for Uterine Carcinoma

A simple and highly accurate technic for spotting undiscovered carcinoma of the uterus has been developed by Drs. Daniel G. Morton, Jerry G. Moore and Norman Chang of the department of obstetrics and gynecology, University of California at Los Angeles.

A tiny tube no larger than the lead in a lead pencil is inserted into the uterine cavity. A teaspoonful of sterile salt water is injected through the tube to bathe the uterine cavity and is drained off and analyzed. The cell material found in the fluid is then stained and examined under a microscope to detect any cancerous cells.

The test is a modification of the widely used vaginal smear test, developed by Dr. George N. Papanicolaou and others, which has been more than 90 per cent accurate in detecting early carcinoma of the cervix or neck of the uterus.

However, with carcinoma of the body of the uterus, the standard smear tests are inaccurate 40 per cent to 60 per cent of the time, and the condition often remains undetected until it is too late for cure.

Used in 673 cases, the new technic identified 92.3 per cent of confirmed carcinomas. Only about half or 47.6 per cent of these positive cases had been diagnosed by the vaginal smears.

The average physician can take the fluid sample and it would be very helpful in establishing the correct diagnosis in cases of irregular menstrual bleeding, Dr. Morton said.

The work was reported by the American Cancer Society which supported the research along with the University's Committee on Cancer Research.

The Editorial Office of the Journal of the International College of Surgeons will appreciate receiving the names of our members who wish to aid in abstracting the foreign literature. Those who are interested, kindly communicate with Dr. Max Thorek, Editor-in-Chief, Journal of the International College of Surgeons, 850 West Irving Park Road, c/o The American Hospital of Chicago, Chicago 13, Illinois, U.S.A.

UROLOGY AWARD

The American Urological Association offers an annual award of $1,000 (first prize of $500, second prize $300 and third prize $200) for essays on the result of clinical or laboratory research in urology. Competition shall be limited to urologists who have been graduated not more than ten years, and to hospital interns and residents doing research in urology.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Roosevelt Hotel, New Orleans, Louisiana, April 28-May 1, 1958.

For full particulars write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before December 1, 1957.

FINDINGS AT A.M.A. MEETING

A mass of findings, practical suggestions, and recent developments in all fields of medical science were presented at the 106th annual meeting of the American Medical Association.

At the recent meeting of the American Medical Association in New York a check for $113,581.77 from the Woman's Auxiliary to the AMA was presented to Dr. George F. Lull, vice-president of the American Medical Education Foundation, by Mrs. F. M. Fargher (left), the Auxiliary AMEF chairman, and Mrs. Robert Flanders, immediate past Auxiliary president, for distribution to the nation's medical schools.

POLIO CONGRESS HELD

Encouraged by American success with the Salk vaccine, top-ranking medical scientists, physicians and surgeons from more than 50 nations met July 8 to 12 to discuss a worldwide assault on polio. The occasion was the Fourth International Poliomyelitis Conference under the auspices of the International Poliomyelitis Congress. Basil O'Connor, president of the United States National Foundation for Infantile Paralysis, was also president of the Congress.

The Geneva meeting opened July 8 with reports of the official delegates on the nature of the polio problem in their respective nations.

Subsequent sessions of the Conference will deal with the newest medical and surgical methods of treating polio; with virus diseases resembling polio and with basic researches into the nature of viruses and their interaction with living cells.

PASSANO FOUNDATION AWARD

Doctor William Mansfield Clark, Professor Emeritus, Department of Biological Chemistry, Johns Hopkins University School of Medicine, has won the $5,000 Passano Foundation Award for 1957. On June 5, during the week of the American Medical Association convention in New York City, a reception and dinner was held at the Waldorf-Astoria Hotel to honor Dr. Clark. The Award was formally made at that time. Doctor David B. Allman, President of the American Medical Association, was one of the speakers, and Doctor A. Baird Hastings, Professor of Biological Chemistry, Harvard Medical School, made an appraisal of Dr. Clark's contribution to medical science.

The Award was made to Doctor Clark in recognition of his long and distinguished career as investigator and teacher, and for his demonstration over the years of the importance of physical methods, notably in the control of *p*H and of oxidation-reduction, to the study of life processes.

Some of the reports were:

• Final figures on the smoking habits of 188,000 men 50 to 70 years old over a 44-month period, as presented by E. Cuyler Hammond, Sc.D., Director, and Daniel Horn, Ph.D., Assistant Director, American Cancer Society statistical research section, indicate that death rates from all causes combined rise with the number of cigarettes smoked daily.

Of the 11,870 deaths in the group studied, they pointed out, 5,297 patients with a history of regular cigarette smoking died from coronary artery disease. For those who smoked two or more packs of cigarettes a day, the investigator said, the death rate from primary lung cancer was 64 times that of nonsmokers.

The American Cancer Society team also noted that all of the 51 who died from stomach ulcer had been smokers—46 of cigarettes, two of pipes, two of cigars, and one of both pipes and cigars.

• *En bloc* resection of the internal mammary lymph node chain should be performed in continuity with radical mastectomy when the primary lesion is localized in the central and medial sectors of the breast, Dr. Jerome A. Urban, Assistant Surgeon, Memorial Center for Cancer and Allied Diseases, New York, reported. The combined procedure in 275 cases resulted in a 10 per cent improvement in the five-year salvage rate over classical radical mastectomies alone, he said.

• Dr. Oglesby Paul, Clinical Associate Professor of Medicine, University of Illinois College of Medicine, declared that there is no clinical evidence that manipulation of diet significantly alters the incidence or development of coronary atherosclerosis. "Too many sex and geographical factors are implicated in atherosclerosis to permit us to put the blame exclusively on fats generally or any members of the fat family specifically," he pointed out.

• Postoperative mortality following portacaval anastomosis at Columbia-Presbyterian Medical Center has been cut from 33 per cent of 12 cases in 1945-46 to 7 per cent of 55 cases in 1955-56, Dr. Arthur H. Blakemore, Associate Professor of Clinical Surgery, College of Physicians and Surgeons, reported at the annual Columbia-Presbyterian Surgical Service Alumni Day.

Dr. Blakemore attributed the decrease to improved anesthesia and improved surgical techniques, such as anastomosing the portal vein into the vena cava at an angle to decrease turbulence.

Portacaval anastomosis is not advocated for patients with marked liver failure, whether or not bleeding from esophageal varices can be controlled, he said. Patients with minimal liver failure who require emergency surgery may do better with hypothermia to protect the liver from anoxia, he added.

CARDIAC ALKALOID HELPFUL IN ANGINA PECTORIS

Crystalline visnagan, isolated by a new method by Portuguese investigators, has been found highly effective in treatment of angina pectoris, Prof. J. Moniz de Bettencourt, Lisbon, reported at the Hôpital de la Pitié's 10th annual Cardiologic Week in Paris, France, organized by Prof. Camille Lian of the Faculté de Médecine.

After a week's administration of this drug, given orally or intramuscularly, frequency and intensity of attacks diminish, at times markedly, the speaker declared, while capacity of effort (Master's test) increases an average of 75 per cent. Action has been found favorable in about two-thirds of the cases.

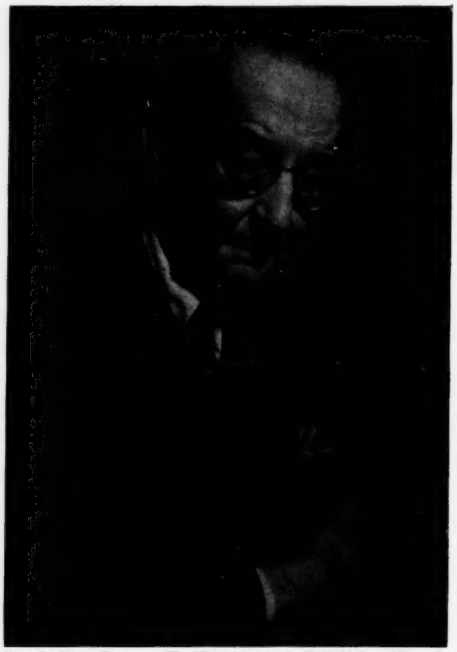
The new agent, like the drug khellin, which has been employed to similar effect in recent years, derives from Ammi visnaga. When visnagan was found to have a much stronger action than khellin on experimental animals, it was decided to try it on human patients.

Professor de Bettencourt reported that his experience with visnagan already covers 70 cases. Its chemical formula is not yet definitely known although it is thought to be a coumarin.

IN MEMORIAM

GEORG ERNST KONJETZNY, M.D., F.I.C.S. (Hon.)
1880-1957

Prof. Dr. Georg Ernst Konjetzny F.I.C.S. (Hon.), died on February 10, 1957, depriving his students and associates of a great teacher and friend, and his patients of a dedicated healer.



Prof. Dr. Georg E. Konjetzny, F.I.C.S. (Hon.)

Born at Gleiwitz, Upper Silesia, Prof. Dr. Konjetzny attended the Royal Greek-Latin High School of Gleiwitz. His father was an architect, but the young Konjetzny chose another field. He began to study philosophy and theology at the University of Breslau, in an attempt to find ultimate truth. His friends were aware of the long struggle with himself that finally resulted in his dedicating himself to God's service as a physician. He now took up the study of medicine, receiving his medical degree from the University of Breslau and passing his examinations in 1905.

A brief outline of his life would show that he joined the Institute of Pathological Anatomy at Chemnitz in 1907, where he acquired the careful skill of the pathologist; he was chief assistant to Prof. Anschütz at the University Clinic of Surgery, Kiel, from 1908 to 1913, when he became Professor of surgery and surgical pathology; he became a consulting surgeon with an army corps during World War I, assistant titular professor of surgery at Kiel, 1918, extraordinary professor in 1920, chief surgeon of the Municipal Hospitals at Dortmund in 1930, full professor of surgery and director of the University Clinic of Surgery at Greifswald in 1934; he was summoned to the University of Hamburg in the same capacity in 1935, and was emeritus in 1950.

This outline would scarcely reveal what his colleagues knew of his medical insight. His approach to the problem of carcinoma of the stomach was unique; no one before him had ever examined a resected stomach with such acumen, thorough pathological knowledge and such refined technique.

While outstanding in stomach surgery, he took the initiative in chemico-surgical research leading to the development of cytostatics. He was much interested in the genesis of precancerous stages of carcinoma of the stomach, believing that gastric carcinoma is caused by faulty diet.

He was the author of several books, and was in addition the co-founder of the German Section of the International College of Surgeons, in which he also served as a member of the Board of Trustees. The College conferred on him the title of "Master Surgeon."

Truly international in spirit, he was associated with surgical bodies of many nations. He will be mourned by them all.

—G. Domagk

ERNEST E. JOHNSON, M.D., F.I.C.S.
1918-1957

Death has taken a forty-one-year-old surgeon whose hopes were high. Always untimely, it deprived him of what he wanted most—to be present at the Convocation of the International College of Surgeons, where as a newly elected Fellow he would receive the cap and gown.

Dr. Ernest E. Johnson, who had stormed ashore with the first wave of Marines in the capture of Guam, died on April 12, 1957, after several months' illness. Cancer was the cause of death.

His life had been a full one, his contribution to medicine significant. He was born in Passaic, N.J., where his father had been a merchant on the Eastside for many years. He earned his Bachelor of Arts degree at Syracuse University in 1937 and his medical degree at the same university in 1942. Internship followed at the Jersey City Medical Center, 1942-43.

In 1943 Dr. Johnson was called up for service in the Sixth Marine Division in which he served for three years. Before being assigned to active duty, he studied tropical medicine and surgical technic and was thus armed to accept duty with the Fleet Marine Force in the Pacific. He had also served as surgeon of the Destroyer *Beatty* in the Atlantic and in the Mediterranean, and had served in North Africa and Sicily.

After being released from service, he returned to Jersey City Medical Center, where he became house surgeon in residency from 1946 to 1948. He then joined the Moore-McCormack Steamship Line as ship's surgeon as a prelude to private practice, which he entered on May 1, 1949.

Always intellectually curious, Dr. Johnson strove to increase his store of medical knowledge. He took advanced courses in gynecology and surgery of the gastrointestinal tract, given at Seton Hall University under the sponsorship of the Essex County Medical Association. He became a member of professional organizations that could provide the fellowship of his peers and so widen his horizons: the American Medical Association, the California Medical Society, the Academy of Medicine of New Jersey Hospital (Fellow), where he was on the associate staff in general surgery, and the International College of Surgeons. His community and hobbies also had a place in his life; he was a member of the National Aeronautical Association, the New Jersey Pilot's Association, Amvets, St. Stephen's Roman Catholic Church, and the Holy Name Society of the Church.

Poignant indeed is the letter we received from his sister, Miss Minnie Johnson shortly after he had passed away at his home in Passaic. She tells us:

" . . . He first became ill on Nov. 5, 1956 and never regained health. He did look forward to the convocation and often told us how beautiful and impressive the ceremony is and what a privilege it is for the family of the doctor to witness it. He also mentioned that he didn't want to be the one whose chair will be draped with cap and gown. His hopes were high, and so were ours, that we would all be present at this Convocation . . . " A day after his operation in November, Dr. Johnson had been notified of his acceptance as a Qualified Fellow of the International College of Surgeons.

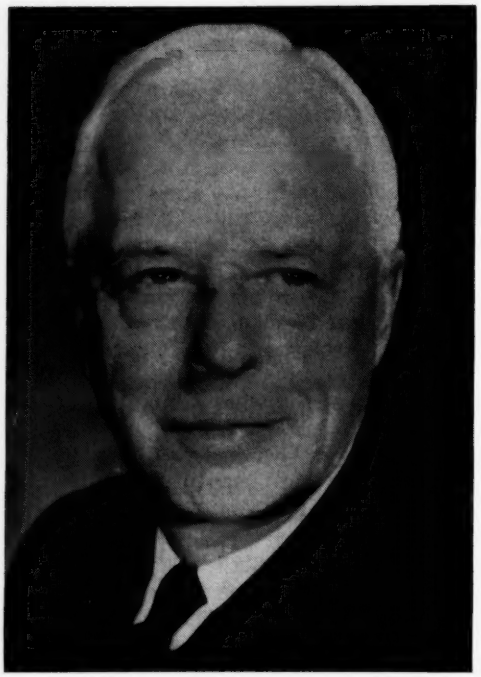
It may have been a sense of prophecy that made him dispose of the Cessna in which he had logged so much flying time, a few months before his death.

DR. JAMES A. JACKSON, F.A.C.S., F.I.C.S. (HON.)

Dr. James A. Jackson, F.A.C.S., F.I.C.S. (Hon.), a founder of the Jackson Clinic in Madison, Wisconsin, died on March 15, 1957, following a prolonged illness.

With his father, Dr. James A. Jackson Sr., a pioneer Wisconsin surgeon, and a brother, Reginald, he founded in 1917 the clinic that bears the family name. Dr. Arnold S. Jackson, F.A.C.S., F.I.C.S., became associated with the group on completing his fellowship at the Mayo Clinic in 1922.

Dr. James A. Jackson was elected to Honorary Fellowship in the International College of Surgeons at the Cleveland meeting in 1950. Illness shortly thereafter prevented his active participation in College activities, but he always maintained a keen interest in its affairs and had the satisfaction of seeing seven of his clinic associates, as well as many former assistants, become members.



Dr. James Jackson, F.A.C.S., F.I.C.S.

He began the practice of surgery in 1911 after completing his medical studies at Columbia College of Physicians and Surgeons, being one of four brothers to graduate from this institution. His hospital training was gained at Bellevue in New York. When he began practicing, his father and brother, Reginald, were still engaged in pioneer surgery in Wisconsin, and he himself has operated on kitchen tables in farm homes.

In the days when open reduction of fractures was largely frowned upon, Dr. Jackson built up a reputation in this field and became widely known, along with Dr. Sherman of Pittsburgh. He developed the so-called "no touch technic" to a high degree and, as a consequence, encountered but few wound infections in the pre-sulfa era. He became widely known for his development of several instruments used in the reduction of fractures as well as for his numerous contributions to the medical literature. He was a member of Grace Episcopal Church, the Madison Club and Maple Bluff Country Club.

Dr. Jackson was a member of Phi Delta Theta Fraternity. His professional associations included membership in the American Medical Association, the American College of Surgeons, the International College of Surgeons, the Western Surgical Association, the Wisconsin Surgical Society, and the American Railway Surgeons Association.

Dr. Jackson is survived by his wife and five children, three daughters and two sons, one of whom, Dr. Robert D. Jackson, is now in active practice.

A tribute paid him by a colleague said, "Probably it is not too important that Jim has died — it is immeasurably important that he has lived." At least it is *more* important that he has lived, even to those with most cause to mourn his death, for the human qualities that bring forth such comment cannot die.

HARRY MACDONALD PEGGS, M.D., F.I.C.S.

1879-1957

Dr. Harry MacDonald Peggs, a physician and surgeon for fifty-five years and Vermont State Regent for the International College of Surgeons, died April 20 in Burlington, Vermont. He was 76. His was a distinguished career.

Born in Swanton, Vermont, on September 21, 1879, Dr. Peggs had practiced in New York for forty years before returning to his native state. He attended the University of Vermont and Baltimore University, where he received his medical degree in 1900. His postgraduate studies were conducted in England, Germany, and the United States. In London he worked with Sir Robert Guy of Guy's Hospital and in this country he did postgraduate work at the Woman's Hospital and Medical College in New York.

During World War I, he returned to the United States to recruit physicians and nurses to work in England. He assisted the Imperial Medical Society in this campaign and organized a "shilling fund" in this country to purchase medical and surgical supplies for the British.

Dr. Peggs opened an office in St. George, S. I., New York, which he had for forty years. In his career in New York, he was co-founder and chief surgeon of the Richmond Memorial Hospital on Staten Island, surgeon of the Woman's Hospital and Medical College, chief gynecologist of St. Vincent's Hospital, physician and surgeon in charge of St. Michael's Home and Hospital and gynecologist at Polyclinic Hospital.

He also served as consultant on medico-legal matters for the Standard Oil Company, the New York Telephone Company and several insurance companies. For seventeen years he was a director of the Tottenville National Bank on Staten Island.

In 1935, Dr. Peggs was a leader in the formation of the cancer clinic at St. Vincent's. It was the first such clinic on the Island.

He was surgeon in charge of Mount St. Michael's Home and Hospital, Greenridge, N.Y., for 25 years. He was also chairman of the committee that founded St. Ann's Mission in Great Kills and served in a consulting capacity with the New York Telephone Co., the district attorney's office and a number of insurance companies.

Dr. Peggs was the first Islander to receive a fellowship in the International College of Surgeons. He was a member of the American Medical Association, the New York State and Richmond Medical Societies, the Congress of Gynecologists and Obstetricians and the Greater New York Medical Society.

Dr. Peggs is survived by his wife, Helen Farrell Peggs; three sons, Dr. Donald Peggs of Arlington, Mass.; Gordon E. Peggs of St. Albans, and Frederick MacDonald Peggs of Cleveland, O.; a daughter, Mrs. Robert E. Perry of Piermont, N.Y., and nine grandchildren.

BYRL R. KIRKLIN, M.D., D.A.B., F.I.C.S. (Hon.)

1888-1957

On March 4, the medical world lost a physician whose contributions to roentgenology were of inestimable value. Dr. Byrl R. Kirkland passed away in Rochester, Minn., a few days after a heart attack. He was 68.

Dr. Kirklin was a Hoosier, born in Gaston, Indiana, September 22, 1888. Indiana University awarded him the M.D. in 1914, and the B.C. in 1926. After interning in Indianapolis from 1915 to 1917, he became resident radiologist at Home Hospital, Muncie, and except for two years of war service, practiced radiology in this city until 1926.

He had chosen a young science for his specialty. At the time of his graduation from medical school, the discovery of x-rays was scarcely 20 years old. The vast potential of radiology was still to be tapped. Yet within just a few years after he had earned the M.D., Dr. Kirklin had established himself as a national authority on radiologic diagnosis, particularly of the abdomen. His brilliance in the use of radiology for diagnosis won him an invitation, in 1922, from the Mayo Clinic to initiate special instruction in gallbladder roentgenography. In 1926 the Clinic asked him to join its Section of Diagnostic Roentgenology, and in 1930 he was named head of the Section.

From 1948 until his retirement in 1953 he was chairman of the Sections of Therapeutic Radiology and Diagnostic Roentgenology. In 1951 he became a senior consultant in the section of Diagnostic Roentgenology. His academic life was equally full: he rose from an instructor (1927) in radiology at the Mayo Foundation to the rank of professor (1933) and continued to teach until 1953.

At the Mayo Clinic Dr. Kirklin continued to explore new technics in x-ray diagnosis, which under his guidance became a field of graduate study for Mayo Foundation fellows.

In 1943, Dr. Kirklin joined the U.S. Army Medical Corps with the rank of colonel. He served as chief consultant in radiology to the Surgeon General of the Army. The Secretary of War authorized him to wear the Army Commendation Ribbon for distinguished service. He was released from duty in 1945. Since 1946 he had been an expert consultant in graduate education and radiology to the Secretary of War, senior civilian consultant in radiology to the Surgeon General of the Army and national consultant in radiology to the Surgeon General of the U.S. Air Force.

A certified specialist in radiology, Dr. Kirklin was a member of the founders' group and organizational committee of the American Board of Radiology and had been secretary-treasurer of the board since 1934. He was a fellow of the American Medical Association and in 1936 was chairman of the section on radiology. From 1946, he was a member of the House of Delegates, and in 1948 a member of the Council on National Emergency Medical Service and of the Joint Committee for Hospital and Residency Appraisal. He was a fellow of the American College of Physicians and the American College of Radiology (president, 1945) and an honorary fellow of the International College of Surgeons. He had memberships in the following organizations: the American Gastroenterological Association, the Radiological Society of North America,

the International Congress of Radiology, the Central Society for Clinical Research, the Minnesota Trudeau Society, the Minnesota Radiological Society (of which he was president), the Alumni Association of the Mayo Foundation, Sigma Chi academic fraternity, Phi Rho Sigma professional medical fraternity, and the Society of the Sigma Xi.

Dr. Kirklin was an honorary member of the Radiological Society of the Republic of Colombia, Sociedad Radiologica y Fisioterapia de Cuba, the Sociedad Mexicana de Radiologia y Fisioterapia, Association of Gastroenterologists of Paris, the Royal Society of Medicine of London, the Deutsche Röntgen-Gesellschaft, Sociedad Radiologica Panamena, the Academy of Medicine of Muncie, Ind., Detroit Roentgen Ray and Radium Society, the Mississippi Valley Medical Society, the St. Louis Medical Society and the Chicago Roentgen-Ray Society. He was a corresponding member of the Academia Nacional de Medicina de Colombia and of the Sociedad Venezuelana de Radiologia.

From 1950 onward Dr. Kirklin was chairman of the Minnesota State Advisory Committee to Selective Service. Since 1946 he had been a member of the advisory editorial board of the "Bulletin of the U.S. Army Medical Department," and was a member of the editorial boards of "Gastroenterology" and the "American Journal of Roentgenology," "Radium Therapy and Nuclear Medicine."

Dr. Kirklin until his death was secretary-treasurer of the Advisory Board for the Medical Specialties, with offices in the Hotel Kahler, Rochester.

Dr. Kirklin married Miss Gladys M. Webster on June 3, 1915. Mrs. Kirklin, a son, Dr. John W. Kirklin, a member of the division of surgery of the Mayo Clinic; and a daughter, Mrs. K. J. Ladner, all of Rochester, survive, as do three brothers and a sister: Dr. Oren L. Kirklin, of Indianapolis; Floyd Kirklin of Rushville, Ind.; Wayne Kirklin, of Muncie, Ind.; and Mrs. Arthur Saint, of Newcastle, Ind.

JOSÉ ANGEL COTO GARBANZO, M.D., F.I.C.S.

1893-1956

A great surgeon and statesman of Costa Rica left the ranks of our College last year. Dr. José Angel Coto Garbanzo, F.I.C.S., was Ambassador to Italy from Costa Rica when, in May, 1956, his health failed and forced his retirement. He died in December of that year.

The son of Marcelino Coto Velasco and Estela Garbanzo Garbanzo, the doctor was born in San Jose, Costa Rica on September 22, 1893. He received his primary education in the Escuela pública Edificio Metálico of San José and his secondary education in the Liceo of Costa Rica, San Jose, receiving the degree of Bachelor of Science and Letters in 1909. He was graduated in medicine and surgery from the Real Universidad de Bolonia, Reino, Italy, in 1919. During World War I he was an assistant at various hospitals in Europe, specializing in surgery of the biliary passages.

In 1922 he became a member of the Facultad de Medicina de Costa Rica, and one year later married Victoria Coronado Castro in the city of Cartago.

From 1926 to 1954 his contributions to medicine were notable and those to his nation's statecraft no less outstanding. From 1936 to 1940 he served as deputy to the Constitutional Congress of Costa Rica, where his brilliance solved national problems at many levels. Always concerned for the health of his countrymen, he presented a significant work, *Endoarteritis Obliterante*, before the Congress during this period.

Appointed as Ambassador to Italy in 1954, he performed his duties with integrity and skill, stopping reluctantly when illness took its toll. On December 14, 1956 he ended his career.

WILLIAM HERMAN STOKES, M.D., F.A.C.S., F.I.C.S., D.A.B.

1894-1957

Dr. William Herman Stokes died in Lake City, Michigan on April 8, 1957 after a recurring illness of many years. He was born in British East India on July 17, 1894, the son of Herman and Ellen Hill Stokes. He was a graduate of Tubingen Gymnasium in Germany, coming to the United States in 1913. He was naturalized in 1918 at which time he was a lieutenant in the Sanitary Corps, U.S. Army, with the A.E.F.

Dr. Stokes graduated from the University of Michigan Medical School in 1922 and served the following three years in ophthalmology residency at the University Hospital, Ann Arbor, Michigan.

In 1925, Dr. Stokes became ophthalmologist for the Dallas Medical and Surgical Clinic in Dallas, Texas, where he remained in practice until he was appointed Associate Professor of Ophthalmology in the Medical College, University of Nebraska in 1930. He held the Chair of Professor and Chairman, Department of Ophthalmology in the same school between 1933 and 1943, when he was forced by illness to resign. Since retirement he had been conducting a limited practice in Lake City, Michigan but had continued to maintain an active attendance at national meetings.

Numerous articles by Dr. Stokes have appeared in medical journals. He was also a member of the American Medical Association, American Academy of Ophthalmology, American College of Surgeons, International College of Surgeons, American Ophthalmological Society and Scientific Research Society of America.

Dr. Stokes' death was a serious blow to the community he had been serving and to his colleagues in Michigan. His frequent visits to the University Hospital were always much appreciated by the ophthalmology staff because of the advice and council given the younger members.

Dr. Stokes is survived by his wife Margaret Ann.

COLLEGE INTERNATIONAL DE CHIRURGIENS
FOUNDED BY DR. MAX THOREK

The Journal of the International College of Surgeons

FOUNDED BY DR. ANDRE' CROTTI

Section II

Vol. XXVIII No. 2

September, 1957

Editor-in-Chief Max Thorek, M.D., Sc.D., LL.D., F.B.C.S. (Hon.), F.I.C.S. (Hon.), F.P.C.S. (Hon.), F.R.S.M. (Eng.)

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The above depicts a mural just completed by Count Gregorio Calvi di Bergolo of Turin and Venice for the foyer of the Hall of Fame of the International College of Surgeons. Count Calvi is well known in the United States and in many parts of the world for his distinguished art. The mural depicts allegorically episodes in man's life cycle and the surgeon's contributions to his health and welfare. The *Leit Motif* is "Life," "Labor," "Study," "Charity," and the inevitable to which all human flesh is heir.

Who's Who in the International College of Surgeons

PROF. DR. GERHARD DOMAGK, F.I.C.S. (Hon.)

On October 13, 1950, a letter was received at the College from a scientist in Germany. It read,

"I received your kind letter of October 6th and your announcement of my election to the German chapter of the International College of Surgeons. I am glad to belong now as a member to your esteemed Sociciety."

The letter was signed "Gerhard Domagk."

It was significant that a man who had personally sacrificed and suffered much for freedom should join an international organization dedicated to freedom. Prof. Domagk personified the struggle of scientists in totalitarian countries who were striving for truth under impossible conditions.

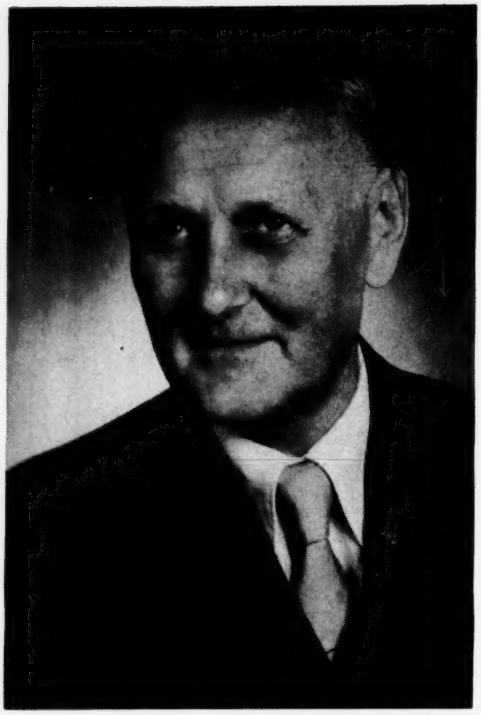
There is drama in the story of his struggle. As early as 1938, Prof. Domagk was nominated by France and the United States for the Nobel prize in physiology and medicine because of his work on the sulfonamides.

The great unsolved problem of World War I was that of sputum-borne infections, especially the pneumonias. Prof. Domagk took the first steps toward the solution of the problem by discovering in 1932 that prontosil, a dye stuff derived from sulfanilamide, protected mice against fatal doses of streptococci. Several colleagues tested it on patients and found it effective in the treatment of erysipelas and streptococcal sore throat. As a result, other nations began to study sulfanilamide, the parent of prontosil.

At the time of Prof. Domagk's nomination for the Nobel prize the Hitler regime forbade its acceptance by Germans. In 1939 Prof. Domagk was again nominated, and soon afterward the Caroline Institute notified him of his success. There were complications, however, for it had been Nobel's express wish that the prize should be awarded to the deserving, even in time of war, regardless of nationality. Thus it was important to carry out the terms of the will for the sake of the international prestige of the prize and the integrity of the judges. But now the Nazi government intervened. Because a previous prize winner, journalist Carl von Ossietzky, was arrested by the Nazis for treason in 1933 and was nonetheless awarded the Nobel Peace prize in 1936, Hitler issued a decree forbidding Germans to accept the prize. He interpreted the award to Prof. Domagk as an act of hostility toward Germany.

Soon after sending his letter of acceptance to Sweden, Prof. Domagk wrote a second letter of refusal, its tone clearly revealing that he had written it under duress. Other letters revealed more: He had been arrested in November 1939 and imprisoned without cause by German secret police. After a week in prison he was released and learned that no one in Hitler's medical entourage knew what he had been accomplishing in sulfonamide research! That was why Hitler had assumed some forbidden international relationship afoot and had ordered immediate arrest.

Prof. Domagk was arrested again when he traveled to Berlin to deliver a lecture before an international audience. He was seized at the railway station and forced to sign a statement that he would not give the lecture. His captors feared that he would be questioned about the Nobel prize. At the Ministry of Education he had to sign an already prepared statement in which he declined the prize, and it was then his task to deliver it to police headquarters in Wuppertal so that it could be postmarked from there. The obvious inference would then be that he had written it voluntarily and had mailed it from Wuppertal.



Prof. Dr. Gerhard J. P. Domagk, F.I.C.S. (Hon.)

In a letter describing this experience, he wrote, "After this arrest I knew that I was being watched in everything I did or said, and that every new suspicion aroused against me might be fatal both to me and my family. No apology was ever made for what had happened."

And so it was that the Nobel Prize funds due Prof. Domagk were paid back into the Nobel Foundation in accordance with the terms of Nobel's will. In 1939, after receiving Prof. Domagk's first letter, the Caroline Institute had prepared the usual diploma and gold medal which must be given each winner together with the prize money. They were ready by the time his second letter was received and were waiting when the war ended. Therefore Prof. Domagk was invited to attend the Nobel celebration of 1947 to receive the symbols of his achievement.

Against the dramatic backdrop of these events, Prof. Domagk's life is a miracle of accomplishment against great odds. Since 1928 he has been a professor at the University of Münster, Westphalia, and since 1927 Director of the Research Laboratories for Experimental Pathology and Bacteriology, Farbenfabriken Bayer at Wuppertal-Elberfeld.

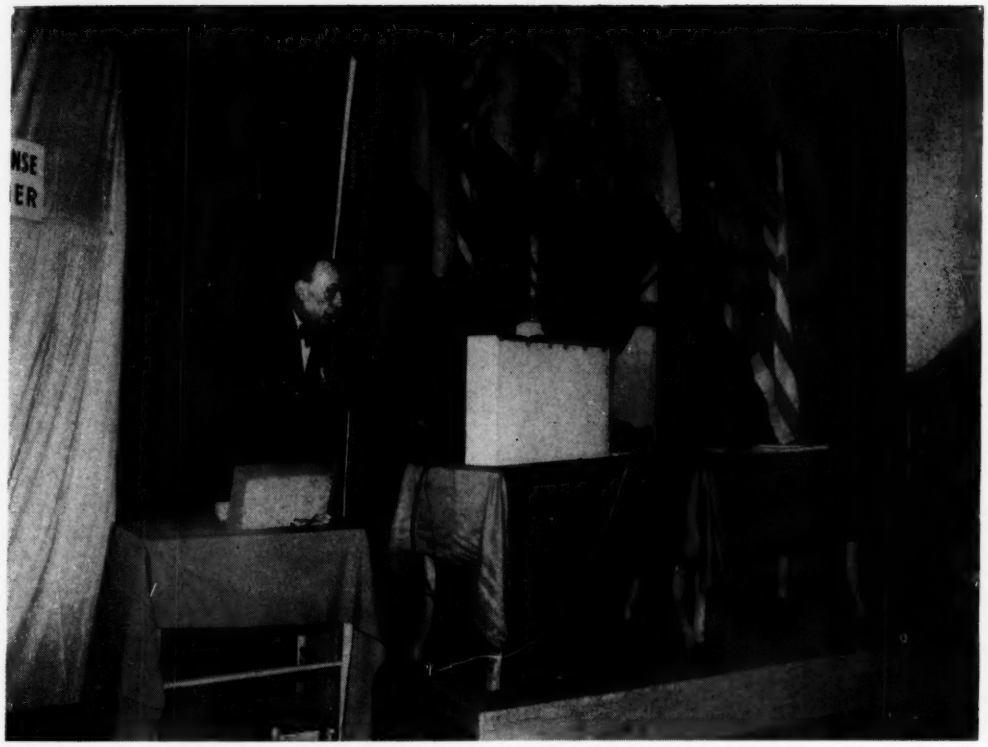
Prof. Domagk was born in Lagow, Province of Brandenburg, in 1895. He received his medical degree at the University of Kiel, 1921. By 1924 he was Privat-dozent at the University of Greifswald. He became a Professor at the University of Münster in 1928. In 1932 he made his brilliant discovery of sulfonamides and went on to do research in cancer and tuberculosis.

Among his many publications are "Arbeiten über Krebs," "Stoffwechsel," "Akute Infektionskrankheiten," "Tuberkulose," 1923-34; "Über Entdeckung der quaternaren Ammonium-verbindungen (Zephirol u.a.) zur Desinfektion," 1935; "Bericht über chemotherapeutische Verwendung der Sulfonamide," 1935; (Domagk-Hegler) "Chemotherapie bakterieller Infektionen," Leipzig, 1939 (3 Auglage 1944); "Pathologische Anatomie u. Chemotherapie der Infektionskrankheiten," Stuttgart, 1947; "Chemotherapie der Tuberkulose mit dem Thiosemikarbazonen," Stuttgart, 1950; "Entdeckung der Heilwirkung des Isonikotinsäurehydrazids (Neoteben) und seiner Derivate zur chemotherapeutischen Behandlung der Tuberkulose," 1950, 1951.

In 1925 Dr. Domagk married Gertrud Strube. They have three sons and one daughter.

No honor is too great for this brilliant and modest scientist. We recall with delight his attendence at the College Congress in New York accompanied by his equally charming and modest wife and our late lamented Prof. Lezius of Hamburg, whose untimely death was a loss to his family, to surgery and to the world.

We are proud that the name of Prof. Gerhard Domagk is engraved on the escutcheon of the International College of Surgeons.



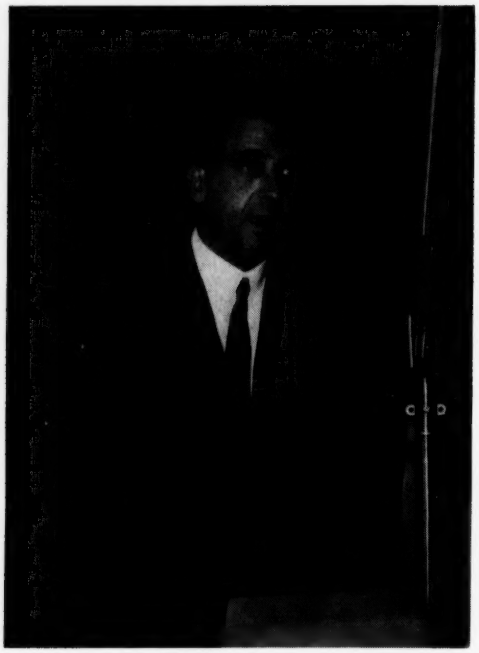
Prof. Dr. Raymond Darget, F.I.C S. (Hon.) addressing Congress

CONGRESS OF THE FRENCH SECTION, INTERNATIONAL COLLEGE OF SURGEONS REIMS, MAY 24-26, 1957

In accordance with its national character and to expand its European contacts, the International College of Surgeons' French Section held its congress at Reims May 24-26, 1957.

An outstanding meeting was recently held at Berne, with **Prof. Dr. A. Nicolet** presiding, and another—a meeting of the Belgian Section—at Liège—presided over by **Prof. Dr. G. Lambert** and including two surgical symposiums. The Reims meeting was held under the able chairmanship of **Prof. Dr. J. Bouvier,** formerly director of the Cancer Center and professor of surgery at the Reims School of Medicine, special honors being paid to this distinguished institution and the eminent surgeons Doyen and Lardennois.

The meeting, which abounded in the picturesque, took place in the famous cellars of the house of Pommery and Greno, whose hospitality is famous, and it attracted a goodly number of French congress members and eminent members from other nations. Among them were Professor Jentzer (Geneva), Drs. Martin-Lagos (Madrid), Battezzati (Italy), Nicolet and Oltramare (Switzerland), Boshamer (Germany), Lambert (Belgium), and Alexander and Muesham (United States).



Prof. Charles Dubost, Paris.

At the reception held at the Hôtel-de-Ville, Dr. Max Thorek gave an appropriate welcoming address in honor of Chairman Schneiter and pointed out the scientific and humanitarian goals of the College.

The scientific program was preceded by an opening talk dedicated to the memory of Doyen, whose fabulous career was traced by Dr. Bouvier. The program comprised essentially three especially relevant symposiums:

1. *The care of transportation injuries*, a problem of acute interest; its details of practical therapy were presented by Drs. Thalheimer and Bourret.

2. *Current practices in cardiac and thoracic surgery*, in which the contributions of Drs. Martin-Lagos (Madrid), Battezzati (Parma), Jentzer (Geneva), Stalport (Liège), Dubost (Paris), Lortat-Jacob, Laborit, Monod, and Welti proved to be of great interest and quality.

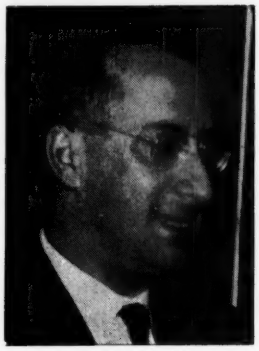
3. *The study of ureteral-plastics* was discussed by Dr. Ducassou (Algiers).

The final banquet, in an especially cordial atmosphere, was followed by a drawing of lots for two cash prizes to aid two members of the French Congress to be present at the celebration in Chicago of the William Harvey Tercentenary. The winners, Drs. Iselin and Laborit, were enthusiastically applauded by the assemblage.

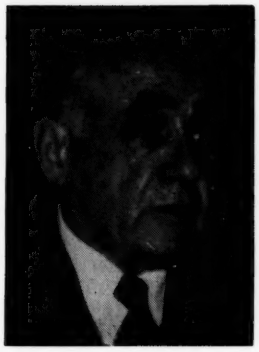
The next Federation Congress of the French Section will enhance the European Sections. It will be held during the World's Fair in Brussels, Belgium, May, 1958.

—R. Darget

At the speaker's table.

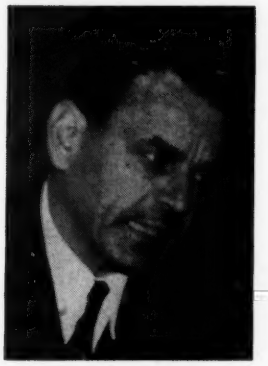


Dr. Stalport, Huy, Belgium



Prof. Jentzer, Geneva

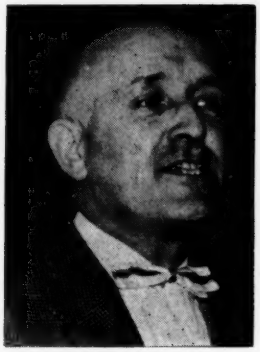
Prof. Leger, Paris.



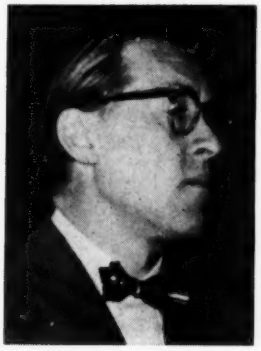
Dr. E. L. R. Delattre, Reims

Prof. Martin-Lagos, Madrid

Dr. Laborit, Paris.

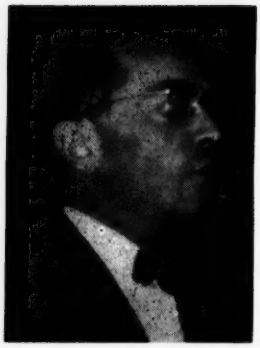


Dr. Nicolet, Berne

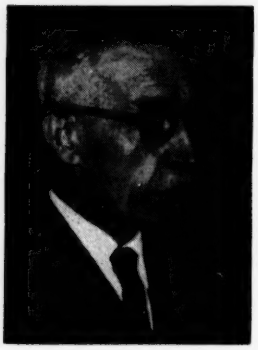


Dr. Chapchal, Utrecht.

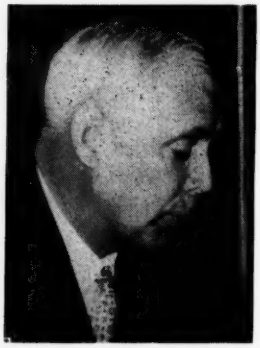
PARTICIPANTS IN THE CONGRESS OF THE FRENCH SECTION
INTERNATIONAL COLLEGE OF SURGEONS
REIMS MAY 24-26, 1957



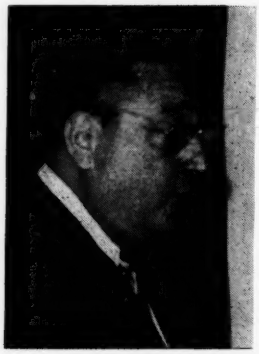
Prof. Lortat-Jacob, Paris.



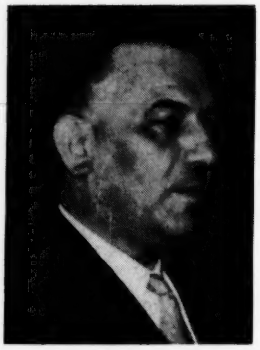
Dr. Bouvier, Reims



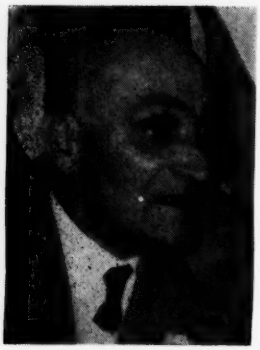
Dr. Welti, Paris.



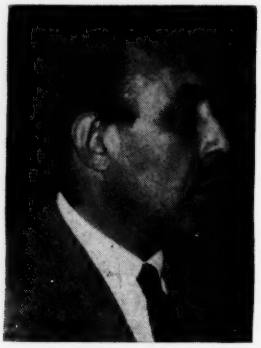
M. Geny, Representative of the Prefect of the Marne.



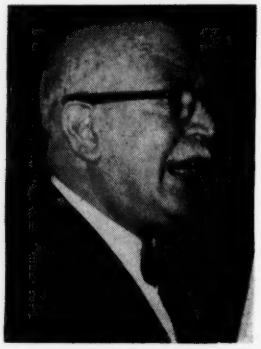
Dr. Lambert, Liège
Belgian Section
President



Dr. Iselin, Paris



Prof. Battezzati, Parma.



Dr. Thalheimer, Paris

PARTICIPANTS IN THE CONGRESS OF THE FRENCH SECTION
INTERNATIONAL COLLEGE OF SURGEONS
REIMS MAY 24-26, 1957

Comments by the Founder

A Postgraduate Odyssey to Europe

A group of Fellows of the International College of Surgeons, with their wives, accompanied me to the Congress of the French Section of the International College of Surgeons, May 23-26, 1957. The meeting was held at Reims, under the Presidency of Prof. Dr. J. Bouvier and turned out to be a delightful experience.

We left New York on H.M.S. *Queen Elizabeth* on May 15. From the moment of embarkation, there were constant pleasant experiences. Aboard ship, a get-together reception was arranged by the International Travel Service. In less than half an hour everyone knew everyone else and henceforth we were like one happy family.

On May 18 we were honored with a reception and cocktail party by Dr. S. M. Rust, the ship's surgeon, a delightful individual well known to the members of our College. His warm personality and keen desire to serve (he is a learned medical man) have tied him to us in the bonds of friendship. He and his staff were most gracious, and the affair proved a highly successful one.

The voyage left nothing to be desired. The air was bracing; the sea calm; and the spirit of Epicurus beckoned us all to gustatory indulgences. How could one resist the temptation? You can order anything from snails to bloaters, matzo-balls or crepes suzettes, or perhaps ham and eggs or even birds' nests. You ask for something you are sure is not on the menu, and lo, it is there for you. It is a gourmet's paradise and the "Slenderella" fans' inferno! I knew from past experience what to expect, and vowed solemnly

Aboard H.M.S. *Queen Elizabeth:* American group is entertained at a reception and cocktail party given by Dr. Rust, Ship's Surgeon.

Prof. Mondor, Dr. Max Thorek and Mme. Georges Bidault, wife of former Premier of France at reception.

that I would curb my appetite, put my hunger-center out of business and stick to my resolution. I failed dismally, and, coupled with the delicious luncheons and dinners partaken in Europe, my dilemma was ominous. I could not and would not look the scale in the face. When I arrived home, I sheepishly put first one foot and then the other on the platform and closed my eyes to gain courage . . . . looked at the news . . . . and what do you think? *I had lost ten pounds!* You figure it out, if you can.

* * *

As usual, Paris was great, warm and hospitable. A number of very fine surgical clinics had been arranged for us. Briefly, Prof. Ameline at Necker Hospital demonstrated the surgical technique of treating aneurysm of the brachiocephalic trunk and performed a dexterous vaginal hysterectomy. Prof. Desvignes, at his clinic, performed operations for cataract and glaucoma, while Prof. Dubost operated on a patient with aneurysm of the abdominal aorta. Much interest was shown in the splendid work of Dr. Laborit at the Val de Grace Hospital, who performed, with the patient under refrigeration anesthesia, a Heller operation, a hepatectomy of the left lobe of the liver for a biliary fistula, resulting from a wound contracted during the Second World War; also, he demonstrated cardiac surgical procedure, with artificial hibernation. Jovial, delightful Dr. Thalheimer operated at the Boucicault Hospital (cholecystectomy, cholangiography, operation for carcinoma of the pylorus and a perifemoral sympathectomy). We were entertained also at his beautiful home. Mrs. Thalheimer speaks English perfectly, as does her husband, and their charming daughter is a surgical nurse.

Prof. Leger demonstrated the technique of arterial grafting, in addition to per-

forming an operation for spontaneous biliary gastric fistula and two splenoportographic procedures. Prof. Judet, during our visit to his hospital, demonstrated vertebral grafts and Jouvenet's osteotomy. In the evening, Prof. and Mme. Leger entertained the group at a reception and cocktail party at their home. A number of prominent French surgeons and their wives attended.

For me, as a proud father, this was a special occasion, for the Director of the outstanding medical journal of France, *La Presse Medicale,* asked me to transmit the first prize, won by my son, Dr. Phil, for the best motion picture from a country other than France—a beautiful solid silver cup, appropriately inscribed. I shall let you guess how many flip-flops my heart turned at that moment. If you happen to be the father of a gifted son whose gifts are being honored, you know the feeling.

Among the numerous guests was the eminent Prof. Mondor; among the ladies, Mme. Georges Bidault, wife of the former Premier of France. Prof. and Mme. Leger proved, as always, gracious hosts. Prof. Leger is deeply devoted to the ideals of our College. We are grateful to him for the many kindnesses he has often shown to our members when they are in Paris.

To cap the climax, a friend representing me at a sale of autograph documents in Geneva, Switzerland, purchased for me at an auction sale an Ambroise Paré, a Galileo Galilei, a Lucrezia Borgia, a couple of Curie's, some Pasteur's, and—no, I'll tell no more. I promised Mrs. T. not to be swayed by autograph dealers, but I am an incurable addict in that direction, and I am glad of it. Think of the thrill it gave me when I presented some hundreds of priceless documents to the International Surgeons Hall of Fame!

From Paris, we proceeded to Reims. As I

Surgeons and their wives are entertained at a reception by Prof. and Mme. Lucien Leger, Paris.

Director of *La Presse Medicale* presenting cup won by Dr. Philip Thorek as first prize for the best medical motion picture produced by a foreign surgeon. Cup is accepted on Dr. Thorek's behalf by his father, Dr. Max Thorek.

have stated, the Congress was held under the Presidency of Dr. Bouvier, with the assistance of Vice-President R. Delattre and J. Bastian, Secretary. The President of the Committee was Dr. R. Lefèvre; the President of the Ladies' Committee, Mme. Lefèvre. The Congress was a success. It must be recalled that similar Congresses have been held in Turin, Geneva, Bordeaux, Niort and Nantes. It was pleasant this year to visit the famous city of Reims, and the heart of the champagne industry of France, with its many historical landmarks.

At 8 o'clock in the evening of the first day, a dinner in honor of members of the Congress was given at the Cercle Colbert. Dr. Bouvier addressed the assemblage, after which M. Boquet presented a film on Reims and its surroundings. This was followed by an address by M. L. Mary, who spoke about the stained glass windows of the Cathedral of Reims; his remarks were supplemented by a discussion by M. J. Simon, master glass expert.

The next morning, at the opening ceremonies of the Congress, an address was given by the Chairman, Dr. Bouvier, and the first scientific meeting was launched, with Prof. Franquet, Dean of the Medical School of Reims, presiding. The subjects of discussion were Traumatisms and Orthopedic Surgery. The speakers were Dr. Thalheimer, of Paris; Prof. Dr. Bourret, Marseille; Dr. Arnaud, Marseille; Dr. Borrey, Paris; Colonel Favre, Paris; Dr. Lambert, Liège, Belgium; Dr. Nicolet, Berne, Switzerland; Prof. DeCoulx, Lille; Prof. Dr. Judet and Dr. Jean Judet, Paris; Dr. Iselin, Paris; Dr. Chapchal, The Netherlands; Dr. Gentin, Saint-Nazaire; and Dr. Fassin, Paris. There were motion pictures of endoscopies by Drs. Debray on diseases of the neck of the gallbladder. Drs. Caroli and Fourès, Paris, showed endoscopic images. Dr. Dubois of Montreynaud and Dr. Segal of Reims presented

motion pictures on various cystoscopic studies. This was followed by a delightful luncheon in the champagne cellars.

In the afternoon a symposium on genito-urinary surgery was held. The participants were:

Dr. Alexander, Dallas, Texas; Dr. Pollock, Kansas City, Missouri; Prof. Ducassou, Algiers; Dr. Muesham, New York; Dr. Ballanger, Bordeaux; Dr. Bret, Paris; Prof. Lange, Bordeaux; Drs. Lecocq, Clermont-Ferrand, Dufour, Paris; Dr. Van Keerbergen, Brussels, Belgium.

In the section on Endocrinology, Biology and Cancerology, the following participated:

Dr. Auche, Dr. Bernard, Dr. Blanquet, Prof. Lachapelle, Dr. Hirtz, Dr. Brenier, Prof. Darget, Dr. Lamarche and Prof. Despons, of Bordeaux; Dr. Cartron, Algiers; Dr. Lefèvre, Reims.

At 6:30 in the evening, a reception was held in the Grand Reception Hall in the municipal building, tendered by the Municipality of Reims, and presided over by M. M. Pierre Schneiter, Deputy Mayor of the City, and Mr. Auxionnaz, Minister of Marine. The soft music of a fine orchestra added to the enjoyment of the occasion. M. Schneiter delivered a cordial address of welcome. Also present were M. Lobut, Prefect of the Marne; Henry Ecal, Associate Prefect of Reims; Prof. Franquet, Dean of the School of Medicine of Reims; Col. B. de Vieville, Commander of the Military Forces; M. Coles, Secretary-General of the Hotel de Ville; Prince Guy de Polignac; and C. Heidsieck of Dargent.

Following the mayor's address, I responded in the name of the American delegation. The affair was a brilliant one, and has further strengthened the friendships so germane to our desires.

On Saturday, May 25, the scientific program continued under the Presidency of Prof. Leger of Paris. It consisted of a symposium on surgery of the thorax and heart.

The participants were Drs. Monod from Paris; Dr. Herbeau and Dr. L. Alessandri; Dr. Dubourg, Bordeaux; Dr. Laborit, Paris; Prof. Lortat-Jacob, Paris; Dr. Welti, Paris; Prof. Martin-Lagos, Madrid; Prof. Dubost, Paris;

Part of American group of surgeons attending meeting of the French Section at Reims.

Prof. Agr. Leger, Paris; Prof. Faure, Limoges; Dr. Moses, Chicago; Dr. Stalport, Dr. Marcel Roux, Paris; Dr. J. Bouvier, Paris.

After luncheon the scientific session continued, under the chairmanship of Dr. Chapchal of The Netherlands. Among the speakers were:

Prof. Jentzer of Geneva, Switzerland; Prof. Battezzati, Parma, Italy; Drs. Palmer and B. Dorangeon, Dr. J. Tardiveau and Dr. B. Gauducheau, Drs. Wangermez, Bordeaux.

In the evening, the Grand Banquet was held in the Caves Pommery. There were approximately 400 participants. It was a brilliant gathering. The ladies accompanying their surgeon husbands lent much lustre to the occasion. A moving address was given by Prof. J. Oltramare, the newly elected Secretary of the European Federation of the International College of Surgeons, and this was followed by addresses by Prof. Jentzer of Geneva, Switzerland, the indefatigable Prof. Raymond Darget of Bordeaux, and others.

Count Polignac saw to it that champagne (Pommery) of the finest vintage was flowing in literal streams. Sociability, good taste and sincere fellowship highlighted the affair.

During the banquet, officers of the French Section announced two winning surgeons who will present papers at the 22nd Annual Congress of the United States and Canadian Sections of the International College of Surgeons, to be held in Chicago in September, all expenses being paid by the French Section. These were Drs. Laborit and Iselin, both of Paris.

The ladies accompanying the surgeons were cordially received and entertained by a visit to the Saint-Remi Basilica and the Cathedral. They were conducted by M. René Druart, Secretary General of the National Academy of Reims, and M. Rouge, architect of historic monuments. They enjoyed a visit to the Museum, under the direction of Mlle. Popovitch, Curator of the Museum, followed by a tea and champagne party in the old Museum of Reims.

On Saturday, May 25, they were accompanied on a walk through the Epernay vineyard, followed by a tea and champagne party at Chateau Montebello. In this connection, Prof. and Mme. Darget deserve special appreciation and gratitude for their untiring efforts in arranging these meetings.

Headquarters of the French Section meeting at Reims.

On May 24, a special meeting was held, with the following participants:

Prof. J. H. Oltramare, Geneva, European Secretary General; Prof. F. Mandl, Vienna, Secretary of the Austrian Section; Prof. K. Boshamer, Wuppertal-Barmen, Secretary of the German Section; Prof. Martin-Lagos, Madrid, President of the Spanish Section; Prof. Raymond Darget, Bordeaux, Secretary of the French Section; Dr. A. Nicolet, Berne, President of the Swiss Section; Dr. L. Lambert, Liège, President of the Belgian Section; Dr. J. F. Brailsford, Birmingham, Secretary of the British Section; Dr. Chapchal, Utrecht, President of the Netherlands Section; Dr. J. Glazenburg, Hilversum, Secretary of the Netherlands Section; Dr. A. Kline, Vienna, American Medical Society of Vienna; Dr. Jerome Moses, Chicago, Member, International Executive Council; Prof. Nicholas Louros, Athens, President of the Greek Section; Prof. Fahri Arel, Istanbul, President of the Turkish Section; Prof. R. Paolucci, Rome, President of the Italian Section.

At this meeting, it was announced that the College had been formed into A WORLD FEDERATION OF SURGEONS. The Federation for Europe, embracing all the European continent, will be represented by Prof. Dr. Oltramare, of Geneva, Switzerland; the Asian Federation will be represented by Prof. Dr. Komei Nakayama, of Chiba, Japan; the South and Central American Federation, by Prof. Dr. Jorge Taiana, of Buenos Aires; and the North American Federation by Prof. Dr. Curtice Rosser.

The various sections of the Federation will remain autonomous as before, but they will function jointly with their respective Federations. This will provide better organization of European meetings and National and International Congresses. This innovation was enthusiastically accepted and approved.

* * *

There was one disconcerting note at the Reims Congress. We had expected our friends, Mr. and Mrs. Speidel, to be with us. Regrettably, illness of some relatives of the Speidels prevented their traveling to Reims. (I have just heard from them; they have arrived home and will be with us at the Chicago Congress in September.)

* * *

From Reims the group went to Berne, Switzerland, where Dr. Nicolet, President of the Swiss Section of the International College of Surgeons, made their stay pleasant and memorable by arranging clinics and entertainment for them. Mme. Nicolet, a most charming woman, has always been a delightful hostess, doing everything possible for the comfort and happiness of her guests.

From Berne the postgraduate group proceeded to Rome. As we expected, we were received with open arms by Prof. Raffaele Paolucci, head of the surgical department of the University of Rome. He is a brilliant surgeon and an inspiring orator. He is a Senator in the Italian Parliament and President of the Italian Section of the College. Above all, he is a humanist, a kind-hearted man and a devoted friend of the College. I rejoiced to see him again.

He operated for our group in his beautiful newly built operating room, which is a model of perfection. It is equipped with all the latest appurtenances, and is outstanding for convenience and scientific work. He began operating at 9 a.m. and finished before noon. During this time he performed two gastrectomies, one cholecystectomy, an operation for hydatid cyst of the lung and an operation for mitral stenosis! His dexterity and brilliant technique are a delight to the eye and a benediction to his patients. He deserves the best in life. He never fails to advise and to aid anyone in need of his counsel. May his work in the service of humanity continue *ad multos annos!*

His tireless assistant, Prof. Giuseppe Bendandi, is a model of cordiality, and he extended himself to the utmost to make our visit a success. His secretary, Miss Stefania Tonconi, was constantly near to guide and assist. To both Prof. Paolucci and Prof. Bendandi, our deepest gratitude.

Immediately after the operations, Prof.

Prof. Paolucci operating (University of Rome).

Prof. Paolucci addresses the American group.

Paolucci gave a stirring speech to our group on the importance of cooperation among surgeons and surgical organizations. Also, a special luncheon was given by him in the Club dei Principi in the Palazzo Cretani. The next day Dr. and Mrs. Moses and I were guests at luncheon in Prof. Paolucci's beautiful home. Here we found relaxation, inspiration and interesting discussion. Charming Nicoletta, daughter of Prof. Paolucci, and her gifted husband, Prof. Marcozzi, contributed to our happiness.

* * *

On the following morning we had the privilege of enjoying an audience with His Holiness, which was both impressive and inspiring. As is well known, Prof. Paolucci was consultant to His Holiness during his recent illness. His Holiness addressed us in English, as follows:

"Some years ago, when addressing a large group of doctors, We took occasion to emphasize the special need and duty incumbent on your profession to strive continuously for greater perfection in mastering every phase of medical and surgical procedures. We cannot help recalling those words of exhortation this morning in receiving you, gentlemen, and your gracious consorts.

"You come as representatives of the American Section of the International College of Surgeons, a College founded precisely to advance the science of surgery, and to ensure that surgeons throughout the world may share the results of the progress attained in various countries. Is not your presence here in Rome due just to your resolute purpose to approach greater and greater perfection in your profession? Surgical skill and surgical judgment will not be acquired from books alone or lectures. Clinical experience and observation of those most experienced are essential supplements to one's study.

"Hence We cannot praise too highly the nobly human scope of your College and its international character. What more international, or rather supranational, than human ills? You are dedicated men, who in a spirit of admirable self-sacrifice have devoted your energies of mind and heart and body to that essential good of the individual and the community, which is life; and as that dedication carries with it the grave obligation, of which you are so conscious, to profit by and to contribute to the constant development of the forces that may relieve man of the ills that beset him, and to enlarge the frontiers of life, so too it raises you to a level of activity unencumbered by barriers of race or nationality. Our interest in your work and your success is measured by Our unbounded affection for all men. That affection, be assured, is expressed by Our daily prayer to the Creator and Lord of all, that He in His infinite goodness give courage and solace

Luncheon at Club dei Principi, tendered by Prof. Paolucci to the visiting surgeons and their wives.

Reception at University of Rome, given by Prof. Paolucci to American surgeons and their wives.

Audience of the American group with His Holiness Pope Pius XII.

to the suffering, enlighten and guide the members of the medical profession and in the end grant to all eternal life."

* * *

Before leaving Rome I visited The Museum of Medical History (Instituto di Storia della Medicina), which is under the directorship of Prof. Pazzini. He has sent some valuable material to the Italian Room of the Hall of Fame, and the Italian government has paid for these treasured mementos.

* * *

My visit to Prof. Raffaele Bastianelli was most gratifying. When I apprised him I was at the Excelsior, he immediately stated in his kind way, "I am coming to see you." Of course, I would not think of letting him disarrange his schedule to come to the hotel. It was my privilege, therefore, to visit him at his home. It was heartening to see him erect, brilliant, wearing no glasses, and thoroughly conversant with up-to-the-minute medical and other situations in the world. He will celebrate his ninety-fifth birthday in December. We discussed many matters. I felt a pang in my heart when he bade me goodbye, and much was said when his eyes met mine. There was silence for a few seconds, but these few seconds seemed hours. No, not "good-bye," my friend Bastianelli, but "au revoir" — for many more years.

* * *

From Rome the group proceeded to Florence, Venice and Vienna. In Vienna, Prof. Mandl held a highly instructive clinic and did his utmost to see that the visiting surgeons were well taken care of. He was aided by Dr. Arthur Kline of the American Medical Society and others. Prof. Mandl, Secretary of the Austrian Section, is an indefatigable worker in the interest of the College.

A visit to Utrecht was organized through the courtesy of Prof. J. F. Nuboer of the City and University Hospitals. Prof. Nuboer received the group cordially and acted as personal cicerone through the old

university building of Utrecht and a tour of the city, after which the group were invited to his home, where they were graciously entertained.

Under the guidance of Dr. George Chapchal, President of the Netherlands Section, the group paid a visit to the Chest and Heart Surgical Center of St. Antonius Ziekenhuis, where three Fellows of the College, well-known in their specialties, namely, Dr. Klinkenbergh, Prof. Brom and Dr. Schaepkens, operate. A visit to the diagnostic and other departments was also most interesting.

After lunch in the restaurant of the municipal theatre of Utrecht, the surgical group paid a visit to the Diaconessenhuis, visiting especially the operating rooms and the radiology department. Dr. de Laive, general surgeon of this hospital; Dr. Vink, vascular surgeon; and Dr. Chapchal, orthopedic surgeon, are all Fellows of the International College of Surgeons. After the visit, the superintendent of the Diaconessenhuis entertained at tea.

The ladies had the opportunity to meet the wives of other Fellows of the College, among them Mme. Darget, wife of Prof. Raymond Darget, whose enthusiasm is known to many. She has been a tireless worker in the interests of our organization. The beautiful Mme. Nicolet, of whom I have spoken, the charming Mme. Boshamer, wife of Prof. Boshamer, and Mme. Chapchal all are devoted to the ideals of our organization, as are many others. Mrs. Jerome Moses arranged meetings with the visiting ladies to interest them in the form-

American surgical group at the Vatican after their audience with His Holiness Pope Pius XII.

ing of Women's Auxiliaries, following the example set by the American and Canadian ladies in their work for the College.

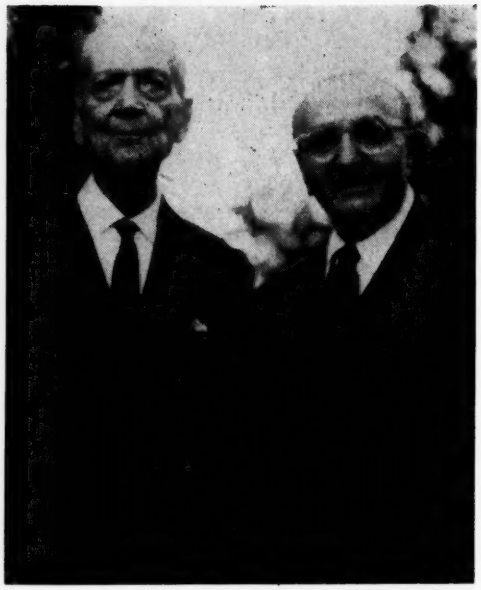
* * *

I inquired in every city in Europe, "What is the European situation?" The invariable answer was, "Europe would today be in the hands of the Communists if it were not for help from America!" Let us continue to help them. Let us surgeons of the I.C.S. continue our ambassadorial work in the spirit of democracy and humanity.

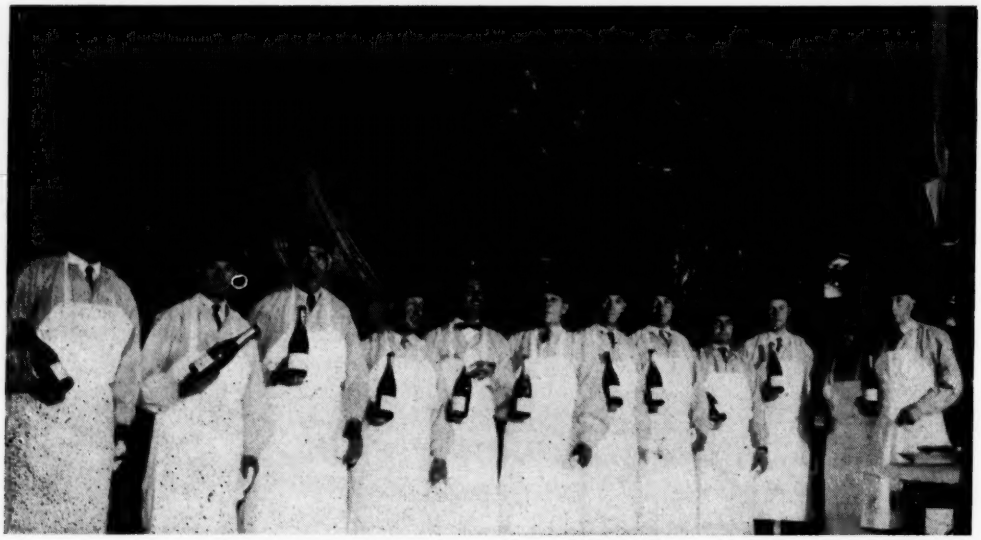
* * *

I wish to express my gratitude to all who made this fine odyssey possible, and also my appreciation of the splendid work done by our Administrative Secretary, Mr. Fawer, and his charming wife, who acted as Secretary in recording the minutes of the special meeting of the officers of the International College of Surgeons in Reims on the 24th.

There is always that inexpressible feeling on returning home when one beholds from boat or plane Bartholdi's Lady with the Lamp on Bedloe Island. . . . . Be this as it may, God willing, I will see you next year in May at the Congress in Brussels, Belgium. Don't fail me!



A visit with Prof. Bastianelli (left). Right, Dr. Max Thorek.



"If you are in Rome do as the Romans do," they say; thus in a country where champagne is made, meet them on equal ground.

From the Executive Director's Notebook

During the past month practically all our efforts were directed toward the Surgical Congress to be held in Chicago, September 8-12. The fine results that Doctor Max Thorek obtained in securing outstanding speakers from Europe will make this one of our outstanding meetings and should attract a very fine attendance.

On June 19, it was my good fortune to have a part in the rehabilitation program given under the auspices of the Governor's Committee for the Employment of the Physically Handicapped for the State of California. At this meeting were prominent citizens from all over the State, as well as many outstanding surgeons. On the program, and a recipient of one of the awards, was the Chancellor of the University of California, Los Angeles, Dr. Ray Allen, whom many of us remember as an outstanding physician of Chicago, having been Dean of the Chicago Medical School. Dr. Allen is giving a great deal of support to the new medical school that has been organized at the University of California at Los Angeles. He expressed his interest in the Eleventh Biennial International Congress of the International College of Surgeons, which will be held in Los Angeles, March 9-13, 1958.

Following this luncheon, I met with the Officers of the Southern California Surgical Section and the plans for the March meeting were discussed. Hotel facilities were investigated and found to be very satisfactory. The Los Angeles Chamber of Commerce is giving active assistance to Doctor de los Reyes, our Regent, who is designated as the General Chairman of the Congress. The Hotel Ambassador will be the headquarters for the convention and, as such, will give visitors from the East and Middle West an opportunity to see the famous Coconut Grove. One of the dinners for the Congress will be held in this fabulous room.

Dr. Ross T. McIntire
F A C.S., F.I.C.S.

The Hollywood Palladium has been selected as the site for the Banquet and will provide food and entertainment that should draw a maximum attendance. Our committees will have the support of the civic organizations of Hollywood and Beverly Hills. A committee is busy at this time, working out many tours for interesting spots in Southern California which will be set up in the days immediately following the scientific assembly. A post-convention tour to Hawaii is in the making also. Detailed information will be furnished to the membership in the immediate future.

The last regional meeting has just been completed at The Balsams, Dixville Notch, New Hampshire. Dr. Max Brodny and his committees produced an outstanding success in this Eastern Sectional Meeting. The Balsams is a resort hotel located in one of the most beautiful spots in the United States. It has a long and interesting history. The selection of The Balsams goes back a full century; it was selected by the Dixville family, owing to the suffering of one of the members from hay fever. This area is completely free from that affliction and so this family settled in Dixville Notch. Through the years accommodations were made available to attract summer visitors.

The scientific program was outstanding and provided a cross-section of modern surgery. The final afternoon of the program was given over to cardiovascular surgery and dedicated to Harvey, discoverer of the circulation of the blood.

It was my good fortune to open this

panel with a broad discussion of the cardiovascular surgical problems. The lecturers were outstanding men in their field; Drs. Stanley Nowak of Boston, Arthur M. Vineberg of Montreal, L. Duchesne of Edinburgh and London, Edgar F. Berman of Baltimore, and Robert E. Gross of Boston.

The official dinner of the session was held on the evening of July 5. At this time Doctor Robert E. Gross was presented with the Edwin and Hanna Speidel Award, for his outstanding service to the children of our nation and the world through his research in the surgery of cardiovascular diseases. As Mr. Speidel was unable to be present at the ceremonies because of his recent arrival from Europe, your Executive Director made the presentation. Doctor Gross's response, as well as the entire ceremony, was carried to Mr. Speidel over open telephone wire to Providence, Rhode Island. At the same time it was announced that Mr. Speidel was making a $1,000 additional award to Doctor Gross, to be used in research for cardiac diseases of children.

The entire meeting was very well attended, and because of the recreational aspects, practically all the surgeons were accompanied by their families. The entertainment outlined and carried out by Mrs. Brodny and her committees was most interesting and all the families took an active part. The Fourth of July was properly celebrated, the main event being the water sports in the afternoon. A special program in the evening, followed by dancing, was presented after a buffet dinner. All in all, the meeting at The Balsams was an outstanding success, from both the professional and recreational standpoint.

At this present writing, the final program for our September meeting is ready for the printers. Every Fellow of the College who can possibly do so should arrange his schedule so that he can come to this meeting. The program will have outstanding surgeons of many countries of the world, as well as outstanding specialists in the United States.

There is much to be gained by seeing what is going on in other nations. The International College of Surgeons is dedicated to the advancement of surgical knowledge and technic. The United States Section has a great opportunity to make its contribution at meetings such as the one coming in September. Consequently, all of us should realize our responsibility to take an individual part in making this meeting a success.

ANNUAL ASSEMBLY IN OTOLARYNGOLOGY

The Department of Otolaryngology, University of Illinois College of Medicine, announces its Annual Assembly in Otolaryngology from September 30 to October 6, 1957. The Assembly will consist of an intensive series of lectures and panels concerning advancements in otolaryngology, and evening sessions devoted to surgical anatomy of the head and neck and histopathology of the ear, nose and throat.

Interested physicians should write to the Department of Otolaryngology, 1853 West Polk Street, Chicago 12, Illinois.

FEDERATIONS OF SURGEONS ON CONTINENTAL BASIS FORMED BY INTERNATIONAL COLLEGE OF SURGEONS

For over two years the International College of Surgeons prepared for the formation of a World Federation of Surgeons. This was accomplished and launched at the Congress of the French Section of the International College of Surgeons at Reims, in May of this year.

The need for such federations developed as a result of the rapid growth of the International College of Surgeons since it was founded in 1935, in Geneva, Switzerland.

Four units have been established, covering North America, Central and South America, Europe and Asia. The College has active national sections in 40 countries, and these will form the nuclei of the federations.

Each federation will develop continental meetings to supplement the biennial congresses of the International College of Surgeons and the yearly sessions of the national sections. This will assure a broader presentation of scientific programs by world leaders in all branches of surgery.

The **European Federation** will comprise Austria, Belgium, The British Commonwealth, Finland, France, Germany, Greece, Italy, The Netherlands, Portugal, Spain, Switzerland and Turkey. **Professor Doctor John Henry Oltramare** of the University of Geneva, Switzerland, will be President.

Professor Jorge A. Taiana, former Dean of the School of Medicine, University of Buenos Aires, is President of the Central and South American Federation, composed of Argentina, Brazil, Colombia, Peru, Venezuela, Costa Rica, El Salvador, Honduras, Haiti, Mexico and Nicaragua.

The **Asiatic Federation** will be composed of Burma, Ceylon, Formosa, China, Hong Kong, India, Iran, Israel, Japan, Pakistan, The Philippines and Thailand, with **Prof. Komei Nakayama,** Professor of Surgery at the University of Chiba, Japan, as President.

Dr. Curtice Rosser of Dallas, Texas, President of the United States Section, of Southwestern Medical College, will be the President of the North American Federation, which will consist of the United States and Canada.

The International College of Surgeons has sections in all of the principal countries of the world with the exception of Russia and its satellites.

LA PRESSE MEDICALE

Le Grand Journal Français de Chirurgie et de Medicine parait chaque semaine, et donne toutes les informations scientifiques et professionelles

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LA PRESSE MEDICALE, Masson et Cie, éditeurs

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United States Section

THE PRESIDENT'S MESSAGE

By the time this issue of the Bulletin reaches you, the annual meeting of the United States and Canadian Sections will probably have been completed. From the appearance of the preliminary program, it should be an excellent Congress. I am looking forward, in particular, to the Convocation, at which our new members are inducted into the College. This is always a glamorous occasion, well rehearsed and splendidly staged by Horace Turner, M.D., F.A.C.S., F.I.C.S., of Chicago, and I feel sure that this year will prove no exception. Since November 1956 three hundred twenty-seven new Fellows and Associates have been approved for membership and, in addition, nearly one hundred Associates have been advanced to Fellowship. Also in the group will be a large number of those who were elected in the past but were unable to attend the previous Convocation to receive their certificates. In other words, the entire class should number over five hundred, which is marked evidence of the continual growth of our organization.

Those who have been in Southern California in early March know that this is perhaps the most pleasant season of the year to enjoy the beauties of this great state. All of us look forward to the joint meeting of the International College and the United States and Canadian Sections to be held at the well-known Hotel Ambassador on Wilshire Boulevard in March of 1958. Even at this early date, under the leadership of the General Chairman, Joseph de los Reyes, M.D., F.A.C.S., F.I.C.S., the essential plans have been crystalized and the scientific program is under construction. The meeting will extend from Monday, March 10, through Thursday, March 13, 1958, with a possible extension for operative clinics on the morning of Friday, March 14. It is contemplated that two sessions of the General Assembly will provide a number of surgical topics of interest to those in general practice. The banquet on Wednesday evening and the final Convocation will be held at the beautiful Palladium.

Dr. Curtice Rosser

The routine business of the College is carried on at the quarterly meetings of the Executive Council. This group hears the reports of committees, gives final scrutiny to the applications of candidates for membership, plans the meetings and performs all the interim functions which cannot await the action of the Board of Regents at our annual sessions. The dedicated interest of the members of this Council makes possible the smooth progress essential to any body so large as ours. A number must come long distances, among them Doctors Harry E. Bacon of Philadelphia, Gilbert Douglas of Birmingham, Claude Hunt of Kansas City, Arnold Jackson of Madison and Henry Meyerding of Rochester, Minnesota. Dr. Ralph Coffey, Chairman of our Board of Regents, comes all the way from Missouri and Dr. Joseph de los Reyes flies from Los Angeles. Dr. Neal Owens, the well-known plastic surgeon of New Orleans, is usually in attendance, as is Virgil T. DeVault, who comes from his post with the State Department in Washington. At the last meeting of the Council, Dr. Ross V. Parks of the Arrangements Committee in Los Angeles came all the way from California to report on the preparations for our next International meeting. A large Illinois group is always present, of course, including our Founder, Dr. Max Thorek, who is always ready to give seasoned and sage advice; Admiral Ross T. McIntire, our Executive Director; Edward Compere, the distinguished orthopedic surgeon who is soon to become President of the organization; and Mr. Alvin Edelman, our attorney.

Section News

UNITED STATES

DRS. CRAIG AND DIXON RETIRE FROM MAYO CLINIC

Doctors Winchell McK. Craig, F.A.C.S., F.I.C.S. (Hon.), and **Claude F. Dixon,** F.A.C.S., F.I.C.S. (Hon.), F.R.S.M. (Hon.) have retired from the staff of the Mayo Clinic.

Dr. Winchell McK. Craig

Dr. Craig, an internationally known neurologic surgeon, former head of the Section of Neurologic Surgery at Mayo Clinic and professor of neurologic surgery at the Mayo Foundation, ended 31 years of active practice on July 1. Noted for pioneering in surgery of the brain and spinal cord, Dr. Craig has received the Certificate of Merit from the University of Minnesota and holds membership and fellowship in numerous medical organizations. For his service to the nation as a Rear Admiral, during World War II, he received the Legion of Merit award, and he was twice chosen by the Surgeon General of the Navy to be one of the medical consultants visiting naval medical installations in the Far East (1955 and 1957) and to lecture to personnel stationed there. He is on the editorial staff of the *Journal of Neurosurgery* and serves on the advisory board of *Postgraduate Medicine.*

Dr. Claude F. Dixon

Since Dr. Dixon joined the staff of the Mayo Clinic in 1928 he has been head of the section of General Surgery. He was appointed an instructor in surgery at the Mayo Foundation in that same year and rose to full professorship in 1945. As a fellow of the Foundation he was trained in surgery largely by Dr. C. H. Mayo, whose first surgical assistant he was for two years. His intense interest in surgery of the neck and abdomen won him renown in these fields, and during his association with the Mayo Clinic he contributed over 300 papers to the literature on a variety of subjects. He is a member and fellow of many medical organizations, national and international, and has been cited for distinguished service in surgery by the University of Kansas.

Alabama Surgical Chapter to Meet

The Annual Scientific Meeting of the Alabama Surgical Chapter of the International College of Surgeons will be held on October 30-31, 1957, in the Outpatient Department Auditorium of the Medical Center in Birmingham, Alabama.

Dr. Louis H. Bauer, at right, secretary-general of the World Medical Association, and Dr. H. Gordon Ungley of London, England, representing the British Medical Association, were among those participating in the first U. S. International Medical Film Exhibition in New York. The collection was the largest ever presented and was shown to physicians and their guests during the Annual A.M.A. Meeting.

Woman's Auxiliary

PRESIDENT'S MESSAGE

The Place of the Woman's Auxiliary in the Surgical World

Mrs. Clifton L. Dance

I thought that this provocative topic would interest our readers. The Eastern Sectional Meeting, which was held at The Balsams, Dixville Notch, New Hampshire, July 1-6, 1957, was excellent from every point of view. I shall include, in this message, the most pertinent portions of my address.

First, however, I should like to tell you a little about this meeting from a woman's point of view. No doubt the scientific aspect and lectures are reported elsewhere in the Bulletin. One lecture however, was of special interest to our Auxiliary. It was given by **Dr. W. F. Walker,** who is at present working on an Auxiliary Fellowship as a Research Fellow in Surgery at the Peter Bent Brigham Hospital in Boston. It was entitled "Adrenal Response to Trauma" and received high praise. Dr. Walker comes from Scotland and is a Lecturer in Surgery at Queen's College in Dundee. Later, in a short after-dinner speech, Dr. Walker made grateful acknowledgement to the Woman's Auxiliary.

This was a most timely demonstration of how the International College of Surgeons is in the vanguard of friendly relations, for it ties right in with **President Eisenhower's** newly inaugurated "People-to-People Program," which urges all Americans to participate in projects which would contribuute to friendship and understanding between this country and nations abroad. Our Woman's Auxiliary, in following the noble pattern set by our parent organization, can feel a deep reward.

Mrs. George C. Robbins of Boston, who is chairman of the Membership Committee in her Section, said that this gave her an inspiring impetus to sign up new members in the Auxiliary—which she proceeded to do with great success. **Mrs. John F. Keane** of Newton, Massachusetts, who presided at the coffee table each day, was not to be outdone. She said it was easy, after the second cup of coffee, to sign up new members, particularly those ladies who had slept through the breakfast hour. These ladies found, to their delight, that **Mrs. Brodny's** committee had set up a beautifully laid table in the upper lobby and were serving delicious coffee interspersed with the enchanting conversation (surgeons' wives you know) of ladies from 17 different states as far apart as California, Texas and the New England States. The memory of these pleasant mornings will linger on.

One encountered so many delightful groups. Rain outdoors did not dampen the spirit of our ladies. No swimming, no golfing! So I came upon an animated little group practising at the grand piano in a corner of the ballroom. A lively young woman, golden blond, was at the piano and another woman, just commencing to gray, was seated at the drums. They were playing a snappy march together with such harmony of sound and spirit that I was amazed to learn that the pianist, Mrs. Ovid Pomerleau, of Waterville, Maine, and the drummer, Mrs. Harlan Angier, of Ware, Massachusetts, had never met before that day. Presently a crowd gathered around them and began to sing, spontaneously, joyously! This resulted in an impromptu glee club and the whole group gave a most entertaining and merry performance for the entire assembly on closing night.

And now we come to Woman's Auxiliary Night. This was indeed an innovation—introduced by Dr. Brodny. At dinner, he

gave over the entire dais, for this night, to the Woman's Auxiliary. All the officers of the Auxiliary who were present were seated there: Mrs. Earl I. Carr, President-Elect; Mrs. Louis F. Plzak, Treasurer; Mrs. Adolph M. Maller, Recording Secretary; Mrs. Deloise H. Downey, Director; Mrs. Robert LeSage, Director; Mrs. M. Leopold Brodny, Northeastern Regional Vice-President and Chairman of the meeting; Mrs. George Robbins, Massachusetts Membership Chairman; Mrs. Ralph R. Coffey, who was our guest; and your President.

Mrs. Brodny introduced me very graciously, and all at once the subject I was given to speak on seemed so big that I was a bit trembly. I looked at my sister officers seated on the rostrum behind me—it was the reassurance I needed to begin:

Of course, there are those who would promptly say, "Women in the Surgical World? Keep them out of it!" This might very likely be said in a jesting manner but I was surprised to come across this opinion in the pages of a recent issue of MEDICAL ECONOMICS. It was in the form of a letter sent to the magazine by an M.D. The page was headed in bold type, "A Woman's Place!" The letter was not written in jest. The good doctor resents the fact that "now-a-days, so many wives attend surgical conventions." He complains further, and I quote, "Lately their audacity has grown to a point where they're bringing the kids along. When you encounter a friend and suggest dinner together, he says, 'I'd like to but I've got my wife along.'" End of quote. Perhaps the surgical organization which the good doctor refers to has no Woman's Auxiliary.

We, however, do have an Auxiliary and our Congresses are attended not only by the wives but by the mothers and sisters as well. I remember a Congress in Chicago during the term that Dr. William Randolph Lovelace served as president. He was accompanied by his two charming sisters. I recall another Congress where Dr. Sidney Vernon (who is scheduled to speak later in the program) introduced me to his mother. I believe that it has been established beyond question that the Woman's Auxiliary does have a place. Just what that place shall be will be determined by how we handle this privilege—by what we do, from here on.

Members of the Woman's Auxiliary, photographed at the Eastern Sectional Meeting of the International College of Surgeons, July 1-6, Dixville Notch, New Hampshire. From left to right, Mrs. George Robbins of the Membership Committee; Mrs. M. Leopold Brodny, Chairman; Mrs. Adolph M. Maller, Recording Secretary; Mrs. Earl I. Carr, President-Elect; Mrs. Clifton L. Dance, President; Mrs. DeLoise H. Downey, Chairman of the Constitution and By-Laws Committee, and Mrs. Robert LeSage, Board Member.

We, of International College, are in a unique position. Ours is the largest as well as the most rapidly growing auxiliary connected with surgery. We are young, with many opportunities open to us. Surgeons coming together from separate communities, separate states and separate lands, to meet in Congress for the exchange of professional knowledge have a rich relationship. At such times each one of us is an ambassador of good will. We meet the wives, daughters, mothers and sisters of these surgeons. We have a social, womanly exchange in such a way as to enhance, not interfere with, the professional mission of scientific meetings.

Our parent body considers the Woman's Auxiliary, "An adjuvant force, assisting the College in achieving its purposes." We have made a good beginning. Each year, the Woman's Auxiliary gives scholarships, sponsors research grants and contributes to our historic Hall of Fame. This year, we have already contributed $7,500.00 to scholarships. This is a great work we are engaged in and we need the interest and membership of every woman who is qualified to be a member. Therein lies our potential strength and place. With a strong membership we can become a great Auxiliary.

We have then, the substantial help and benefits that the Woman's Auxiliary gives to further the aims of International College. We have also the intangible benefits: good will, hospitality, friendliness and a precious feeling of kinship. All these are fostered and enjoyed by the Woman's Auxiliary. Our place can indeed be one of high esteem in the surgical world. Finally, I believe, as our own Dr. Thorek once said, that there is a solid satisfaction not only to the women but to the surgeons themselves, in the increased sense of constancy and purpose that develops when all work together towards a common goal.

Catherine M. Dance

VISITORS TO THE INTERNATIONAL SURGEON'S HALL OF FAME: Dr. Tom Jones, U. of Illinois Medical School; Dr. Edward Hamilton, member, Board of Trustees, A.M.A., Dr. David Allman, pres., A.M.A.; Dr. Ross T. McIntire and Dr. Max Thorek (hosts); and Dr. Gunnar Gundersen, president-elect, A.M.A.

The European Federation

FIRST CONGRESS
THE EUROPEAN FEDERATION
OF THE
INTERNATIONAL COLLEGE OF SURGEONS

Joint Session of the German, Austrian, Netherlands, Swiss, and other Sections

VIENNA

October 18-20, 1957

To be held in the Vienna Medical Society (Billroth-Haus, Vienna)

SCIENTIFIC THEMES

1. *Diseases of Connective Tissues*
   Essayists: **Prof. Bsteh** (Mistelbach), **Gottlob** (Vienna), **Nigst** (Basel), **Schulze** (Kaiserlautern).
2. *Modern Therapy of Malignancies*
   Essayists: **Profs. Boshamer** (Wuppertal), **Burian** (Vienna), **Heppjer** (Graz), **Herbst** (Graz), **Hogler** (Vienna), **Knaus** (Vienna), **Schulze** (Kaiserslautern), **Uebelhör** (Vienna).
3. *Errors in Diagnosis and Therapy*
   Essayists: **Profs. Barthel** (Hamburg), **Böhler** (Linz), **Grünberger** (Vienna), **Henninger** (Vienna), **Huber** (Innsbruck), **Knaus** (Vienna), **Kubitschek** (Vienna), **Mahrberger** (Innsbruck), **Novotny** (Vienna), **Oltramare** (Geneva), **Riess** (Graz), **Starlinger** (Vienna), **Tietze** (Graz), **Wilfingseder** (Innsbruck).
4. *Bone Tumors*
   Essayists: **Profs. Bethge** (Hamburg), **Erhalt** (Graz), **Leb** (Graz), **Mandl** (Vienna), **Ullik** (Vienna), **K. Weiss** (Vienna).
5. *Contrast Visualizations of Internal Organs: their Value and Dangers*
   Essayists: **Profs. Bibus** (Vienna), **Hohenfellner** (Vienna), **Brücke** (Murzzuschlag), **Fritsch** (Vienna), **Fuchsig** (Vienna), **Zaunbauer** (Vienna), **Gollmann** (Graz), **Henninger** (Vienna), **Herbst** (Graz), **Kaindl** (Vienna), **Knaus** (Vienna), **Mahrberger** (Innsbruck), **Pfeiffer** (Leipzig), **Rieder** (Vienna), **Steiner** (Innsbruck), **Vogler** (Graz).
6. *Miscellaneous Subjects*
   Essayists: **Profs. Brücke** (Mürzzuschlag), **Dimtza** (Zurich), **Domanig** (Salzburg), **Duffy** (Los Angeles), **Dworazek** (Vienna), **Heppner** (Graz), **Herzig** (Krefeld), **Kaiser** (Zürich), **Majer** (Vienna), **Willenegger** (Liestal).
7. *Surgery of Athletic Injuries*
   (In connection with the foundation of a special Section of the above in the framework of the International College of Surgeons).
   Essayists: **Profs. Böhler** (Linz), **Chapchal** (Utrecht), **Dimtza** (Zurich), **Ehalt** (Graz), **Jelinek** (Vienna), **Knoflach** (Vienna), **Mandl** (Vienna), **Markus** (Vienna), **Nicolet** (Bern).

NOTE: The final program is in preparation, and will be given to those who register at the time of the Congress. Guest speakers are allowed special time. Others are limited to 10 minutes. Medical men not in practice do not pay any registration fee. Inquiries about scientific matters should be addressed to **Prof. Dr. Felix Mandl, Reichsratsstrasse 11, Vienna I.** Inquiries about housing, social functions, should be addressed to **Osterreichische Verkehrsbüro (Kongressbüro), Vienna I, Friederichstrasse 7.**

PRELIMINARY PROGRAM

First Congress of the European Federation

VIENNA

6:00 p.m. Reception in the City Hall by the **Mayor of the City of Vienna, His Excellency, Franz Jonas** (by invitation).

7:00-7:30 p.m. *Performance at the Opera or the Burgtheater*

Saturday, October 19

7:30 p.m. *Heuringen evening in Grinzing.* Busses will leave the Billroth Haus, Vienna IX, Frankgasse 8, at 7:00 p.m. and return to the hotels around 10:30 p.m.

Sunday, October 20

2:00 p.m. Lunch at the restaurant **Palais Auersperg,** Vienna VIII, Auerspergstr, 1.

Officers of the Austrian Section, International College of Surgeons:
Profs. L. Schönbauer, T. Antoine, P. Huber, F. Mandl, P. Fuchsig, R. Oppolzer.

LADIES' PROGRAM

Friday, October 18

2:00 p.m. *Visit to the Spanish Riding Academy.* Participants will meet at Josefsplatz, Vienna I.

Saturday, October 19

Free morning for shopping.

2:00 p.m. Visit to the *style show,* at Farnhammer, *Vienna I, Kärntnerstrasse 10.*

4:30 p.m. *Tour of the City of Vienna,* taking in the surroundings *of Kahlenberg, Leopoldsberg, Klosterneuberg,* and *Schloss Schönbrunn.* Leaving Billroth Haus, Vienna IX, Frankgasse 8. Tour completed at 7:00 p.m.

Sunday, October 20

10:00 a.m. *Tour of the City, first to the Grotto Capuchin and the Schönbrunn Palace.*

The Bureau will be open daily until 6:00 p.m. Information clerks will be on duty constantly to give detailed information on every phase of the program.

CONGRESS OF THE EUROPEAN FEDERATION of the INTERNATIONAL COLLEGE OF SURGEONS Brussels, May 15-18, 1958

Opening Session on the morning of Thursday, May 15, 1958

Opening address—Moral and Legal Relations Between Patient and Surgeon

Scientific Program.

1. So-called diseases of civilization and the role of surgery in their treatment.
2. Diseases the result of atomic radiation from the point of view of the internist and the surgeon.
3. The pathology of the region of the ampula of Vater.
4. Pitfalls in the treatment of fractures of the upper extremities.
5. Surgery of the sympathetic nerve supply of the genitourinary apparatus.
6. Papers on miscellaneous subjects:
   A. Human tissue banks.
   B. Surgical conditions of the esophagus.
   C. Traumatisms of the skull.

Projected Preliminary Activities of the Congress

Thursday, May 15, 1958

Opening meeting of the Congressists in the morning at the World's Fair at Brussels.

In the afternoon, scientific program.

At 6 p.m. reception at the City Hall of Brussels, followed by visits to Gothic structures.

Evening, visit to the World's Fair.

Friday morning and afternoon

Scientific meetings.

Evening, visit to the World's Fair.

Saturday morning and afternoon

Scientific meetings.

Evening, banquet.

Sunday, May 18

Closing program of scientific works and closing ceremony.

Optional—Visit to Bruges by auto (60 kms. from Brussels), Congressists and their ladies. (Bruges is an ancient city with numerous canals and is known as the Venice of the North.)

CONGRES DE LA FEDERATION EUROPEENNE DU COLLEGE INTERNATIONAL DE CHIRURGIENS
a Bruxelles du 15 au 18 mai 1958

Programme provisoire.

1. Sénance inaugurale le jeudi 15 au matin: Relations morales du malade et du chirurgien.

Programme scientifique.

1. Les soi-disant maladies de la civilisation et le rôle de la chirurgie dans leur traitement.
2. Les maladies d'origine atomique du point de vue de l'interniste et du chirurgien.
3. La pathologie du carrefour Vatérien.
4. Les pièges du traitement des fractures du membre supérieur.
5. Chirurgie du sympathique génito-urinaire.
6. Communications particulières:
   banques de tissus humains.
   oesophage.
   traumatismes du crâne, etc.

Programme actuel du Congrès de Bruxelles 1958

Jeudi 15 mai 1958.

Accueil des Congressistes et à l'exposition de Bruxelles séance d'ouverture, avec un discours sur les relations morales du malade et du chirurgien.

Après-midi: séance de travail.
à 6 heures: réception à l'hôtel de Ville de Bruxelles, et visite du bâtiment gothique.

Le soir visite de l'exposition.

Vendredi: matin et après-midi, séances de travail. Le soir, visite de l'exposition.

Samedi: séances de travail, matin et après-midi; le soir, banquet.

Dimanche 18 mai fin des travaux et séance de clôture à l'exposition.

Facultatif: visite de Bruges (60 kms. à faire en autocar), surtout pour les dames.

Bruges est une ville très ancienne, avec de nombreux canaux, qui est appelée la Venise du Nord.

Sections Abroad

BRAZIL

The closing session of the course on cancer study organized by the Petropolis Regional of the Brazilian Section, International College of Surgeons. Dr. Ugo Pinheiro Guimarães (standing, center , Director of the National Cancer Service, gives the farewell address, "Cancer as a Medical and Social Problem," at the auditorium of the Imperial Museum in Petropolis. Seated at the table, left to right, are Mrs. Heloisa Marsillac, president of the Woman's League to Combat Cancer, Rio de Janeiro; Mrs. Jeny Barros Franco, president of the Petropolitan Society for Care of Lepers; Mr. José Kopke Froes, president of the Petropolitan Academy of Letters; Judge Antonio Neder; Dr. Nelson E. Donat, president of the Medical Society of Petropolis; Don Manoel Pedro da Cunha Cintra, Bishop of Petropolis and Patron of the Regional; Dr. Jorge Ferreira Machado, president of the Petropolis Regional; Mr. Henrique de Magalhães, representing the Municipal Prefect from Petropolis; Dr. Brasilio Bretz, president of the Society for Professional Odontologists, Petropolis; Dr. Ivan Bastos Tavarez, head of the Sanitary District and representative of the Governor of Rio de Janeiro; Dr. Nazareth Braga Peixoto, representing the Municipality, and Prof. Dr. Alberto Coutinho, head of the National Cancer Service and director of the course. Other speakers were Dr. Jorge Ferreira Machado, Dr. Benigno Girão Barroso, and Prof. Dr. Coutinho.

ISRAEL

Prof. Zondek Wins New Laurels

The Solomon Bublick Prize of the Hebrew University of Jerusalem has been awarded this year to **Professor Bernhard Zondek**, F.I.C.S. (Hon.). Prof. Zondek was the discoverer, in 1926, of the female sex hormone and the gonadotropic hormones. He also developed the Ascheim-Zondek Pregnancy Test. He is currently Professor of Gynecology and Obstetrics and Head of the Hormone Research Laboratory at the Hebrew University Medical School, and Head of the Gynecology and Obstetrics Department at Hadassah Hospital.

Dr. Aaron N. Gorelik, F.I.C.S., has been appointed Director of the Cardiovascular Department of the Rothschild Hospital in Haifa. This appointment will continue until the projected Gorelik-Samelson Memorial Hospital for Heart Diseases is built, of which Dr. Gorelik will be the Director.

SCIENTIFIC MEETING OF THE SWISS SECTION OF THE COLLEGE AT STRASBOURG, JULY 4-7, 1957

The Swiss Section of the International College of Surgeons held its scientific meeting at Strasbourg July 4-7, 1957. At the same time, the President of France made a visit to this city, adding to the general excitement. In his capacity as Dean of the Faculty of Medicine, **Prof. René Fontaine** had many responsibilities in connection with the President's visit. Yet he found the time to devote himself to his colleagues at this meeting and to make it the outstanding success we shall always remember.

During these few days there were more stimulating events than one could easily describe in a few short paragraphs. Each morning there were operations in such domains as vascular surgery, and resections of lumbar and dorsal sympathetic chains; there were also demonstrations of techniques of arteriography, aortography and other intricate procedures. Afternoons were reserved for discussions between Prof. Fontaine and his audience on the various problems of vascular surgery, which usually lasted well into the evening, in the Laboratory of Experimental Surgery at the Centre Raymond Poincaré, directed by Professor Fontaine.

Equally stimulating was the opportunity afforded participants to become acquainted with Prof. and Mrs. Fontaine and the professor's surgical assistants, who work with him as a team; The Fontaines invited all the participants to a cocktail party on the day of their arrival, and to a banquet on the last day of the meeting.

—*Professor J. H. Oltramare,* Geneva
Secretary, European Federation of the
International College of Surgeons.

REUNION SCIENTIFIQUE DE LA SECTION SUISSE A STRASBOURG du 4 au 7 juillet 1957

Organisée par la Section suisse du Collège international de chirurgiens, la réunion scientifique qui a eu lieu à Strasbourg du 4 au 7 juillet 1957 a remporté un énorme succès, grâce à la très grande bienveillance du **Professeur René Fontaine,** qui a trouvé moyen de consacrer la presque totalité de son temps à ses collègues, malgré les obligations que lui imposa—en tant que doyen de la Faculté de Médecine—la visite du Président de la République Française.

Donner un compte rendu détaillé de ces journées si passionnantes par tout ce que les visiteurs ont vu, entendu et appris, est chose difficile. Les matinées furent consacrées à des opérations de chirurgie vasculaire, greffes vasculaires, désoblitérations artérielles, résections de chaînes sympathiques lombaires et dorsales, démonstrations des techniques d'artériographie, d'aortographie, etc., etc. Quant aux aprés-midis elles furent toutes réservées à des discussions entre le Professeur Fontaine et ses auditeurs, sur les différents problèmes de la chirurgie vasculaire. Ces discussions se poursuivirent régulièrement jusqu'au début de la soirée dans le Laboratoire de chirurgie expérimentale que le Professeur Fontaine dirige au Centre Raymond Poincaré.

Si la partie scientifique fut admirable, elle fut égalée par l'accueil absolument cordial que reçurent les participants de la part de Monsieur et Madame Fontaine, qui les accueillirent à l'arrivée par une cocktail party, leur permettant de prendre personnellement contact avec leur hôte et les assistants qui constituent la remarquable équipe chirurgicale qui collabore avec lui.

Ces journées se terminèrent par un grand banquet auquel Monsieur et Madame Fontaine convièrent tous les participants, ce qui leur donna l'occasion de témoigner à leurs hôtes leur gratitude pour ces inoubliables journées de Strasbourg.

—*Prof. J. H. Oltramare,* Genève
Secrétaire général pour l'Europe

Medical News Front

Military Surgeons to Convene

The Association of Military Surgeons of the United States will hold its annual convention at the Hotel Statler, Washington, D. C., October 28-30, 1957. The convention will have as its theme, "Professional Excellence—The Criterion of Military Medicine."

Originally, the association was organized to work for the "advancement of military and accidental surgery and all things pertaining to the health and welfare of the civilian soldier," and was restricted to membership by medical officers of the National Guard. Although the objectives of the organization remain the same, membership is now open to all present and former officers of the Medical, Dental, Veterinary, Medical Service, Nurse, and Medical Specialist Corps of the Army, Navy and Air Force, as well as personnel from the Public Health Service and Veterans Administration.

Each year the convention draws approximately 2,000 members from all parts of the nation as well as leading medical members of military organizations from other countries.

Caleb Fiske Essay Contest

The trustees of the Caleb Fiske Prize of the Rhode Island Medical Society announce as the subject for this year's dissertation "Hormonal Relationships in Breast and Prostatic Cancer—Their Practical Application." The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $350 is offered. Essays must be submitted by Dec. 31. For information write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, R. I.

Scientific Film Congress

The 11th International Scientific Film Association Congress will be held Sept. 21-27 in Amsterdam, the Netherlands, at the Royal Institute for the Tropics. Specialist standing committees (research, medical, industrial, veterinary sciences, diffusion of science) will consider films in their particular fields. The medical committee is expected to arrange special meetings on tropical medicine, endoscopic cinema, and cineradiography. Other subjects to be considered include application of infra-red filming, influence of light on living microscopic structures, phase contrast, cinematographic tele-registration, time lapse and slow motion. For information write the Secretariat, XIth International Scientific Film Association Congress, Utrecht (Holland), 59, Catharijnesingel 59, ingang Sterrenbos.

Postgraduate Gastroenterology Course

The American College of Gastroenterology announces that its annual course in Postgraduate Gastroenterology will be given at The Somerset in Boston, Massachusetts, on October 24, 25, and 26, 1957.

The course will again be under the direction and co-chairmanship of **Owen H. Wangensteen,** M.D., F.A.C.S., Professor of Surgery of the University of Minnesota Medical School, who will serve as surgical coordinator and **I. Snapper,** M.D., Director of Medical Education, Beth-El Hospital, Brooklyn, N. Y., who will serve as medical co-ordinator. Drs. Wangensteen and Snapper will be assisted by a distinguished faculty selected from the medical schools in the Boston area.

The subject matter to be covered in the course, from a medical as well as surgical viewpoint, will include, essentially, the ad-

vances in diagnosis and treatment of gastrointestinal diseases and a comprehensive discussion of diseases of the mouth, esophagus, stomach, pancreas, spleen, liver and gall bladder, colon and rectum, with special studies of radiology and gastroscopy.

For further information and enrollment, write to the American College of Gastroenterology, 33 West 60th Street, New York 23, N. Y.

Sterilization Advised in Retinoblastoma

Harold F. Falls, M.D., associate professor of ophthalmology at University of Michigan Medical School, advises that "children surviving enucleation (removal of the eyeball) for retinoblastoma should make a decision about sterilization."

Each year this cancer of the eye causes an increasing number of parents to face the decision of whether to allow doctors to remove one or both of their children's eyes so the youngsters may live.

Retinoblastoma, which appears in children between the ages of two months and four years, presents not only immediate danger to the youngsters, but perhaps long-run impairment to the genetic make-up of future generations.

Discontinue Shipping of Korean Medical Books

The American-Korean Foundation and the United States Army Medical Service have announced the discontinuation of their joint project of shipping medical books contributed by individual physicians, medical schools, hospital and state and local medical societies to Korea. Books should not be sent to the Sharpe General Depot in California as in the past for facilities no longer exist for packing and transshipping to Korea. Over 77 tons of books, valued at $76,000, have been shipped to Korea for distribution to Korean medical schools.

More Extensive Operation for Mammary Cancer

Extension of the radical operation for mammary carcinoma to include *en bloc* removal of the mammary lymph node chain along the internal mammary artery will, according to Dr. Jerome A. Urban, F.A.C.S., D.A.B., Instructor at Cornell University Medical College, prevent the recurrence of cancer in an increasingly large number of patients. Reporting the results of the more extensive radical technic, he said that this operation had been performed on 235 patients with a postoperative mortality of less than 1 per cent; 35 per cent of the series, if treated by classic radical technic, would, he estimated, have been subject to extension of the disease. Of the first 70 patients with operable primary carcinoma who were treated by means of the extended procedure, 81 per cent attained three-year survival. Of the first 60 patients so treated, 76 per cent attained four-year survival. Five-year salvage rates are available on 16 patients, 62 per cent of whom remain free from disease. Only 3 instances of recurrence have been observed in the entire series. Dr. Urban stressed the importance of combining early diagnosis with early and adequate surgical treatment. The more extensive radical procedure is applicable primarily to patients whose general condition will enable them to withstand the added shock, and it should be limited to patients in whom the disease is confined to the regional lymphatic system.

Scars of Skin Cancer Treated with Grafts

Scars of skin cancer of the nose and ear can be treated successfully and with excellent cosmetic results by the use of skin grafts at the time of operation, according to Dr. Charles C. Grace, F.A.C.S., F.I.C.S., Attending Staff Physician at the East Coast and Flagler Hospitals, St. Augustine, Florida. He reported a series of 13 cases of skin cancer of the nose and 11 cases of disease of the skin of the ear.

More than five years have elapsed since operation in 6 cases and more than two years have passed in 10 others. The one death which has occurred was the result of heart disease, unrelated to the cancer. Recurrence has not been observed. The cosmetic results have been uniformly excellent, and in no instances has the graft failed to take. A wide surgical incision is covered with matching skin from adjacent parts of the face or head.

International Conference on Radioisotopes

An international conference, Radio-isotopes in Scientific Research, sponsored by the United Nations Educational Scientific and Cultural Organization, will be held in Paris Sept. 9-20. The conference will be primarily devoted to the discussion of new ideas or methods for the utilization of radioisotopes in scientific research. Recent progress in measuring technics calculated to facilitate use of radioisotopes will be considered. Papers relating to measuring methods and to production of radioisotopes will be read in plenary session.

Other papers will be grouped into two main sections, one concerning the physical sciences and the other the biological sciences. The working languages of the conference will be English and French. Marginal activities, including evening lectures on certain scientific subjects of interest to participants, are planned. For information write United Nations Educational, Scientific and Cultural Organization, Conference on Radio-isotopes, 19 Avenue Kléber, Paris 16e, France.

The Use of Radioactive Cobalt Against Carcinoma

Radioactive cobalt, with its abundance of gamma rays, is extremely useful in the treatment of malignant tumors. Needles of radioactive cobalt may be inserted into the tumor or pellets may be kneaded into a plastic medium that can then be affixed to the affected surface of any cavity. The second method is also used for the sterilization of an operational cavity after the removal of a tumor. Beads of radioactive cobalt are also available and are useful in the treatment of the esophagus, uterus or maxillary sinus. In such cases the beads are strung on a string and are suspended in the cavity under treatment. Pellets of radioactive cobalt may also be embedded in gelatin and inserted inside a soft rubber bag into the stomach, intestines, bladder or an operational cavity. After 20-30 hours of irradiation, the gelatin is removed from the rubber container by aspiration, after which the bag can be withdrawn with ease.

Fractures Go Undetected

Broken bones are being left untreated because doctors are depending too much on what their roentgenograms tell them, Drs. Norman J. Rosenberg and Rudolph S. Reich, Cleveland, Ohio, reported to the American Medical Association meeting in New York.

Even with the new roentgenologic materials and methods there are many so-called "occult" fractures of bone that do not show up in x-ray examinations, but they are there just the same.

These can occur in almost any bone in the body and cause considerable pain, anxiety, disability and expense. Medically, they are defined as fractures that give clinical signs of their presence, such as pain and immobility, but cannot be demonstrated by roentgenologic technics until after healing changes have occurred.

Unfortunately, these healing changes often extend into ligaments and other soft tissues and begin to harden them like bone. This is especially true of occult fractures in the foot and ankle.

Occult fractures have been known to exist for a long time, but instead of improving treatment, this knowledge has merely afforded security to the doctor who receives a negative report from the x-ray department and accepts it as conclusive.

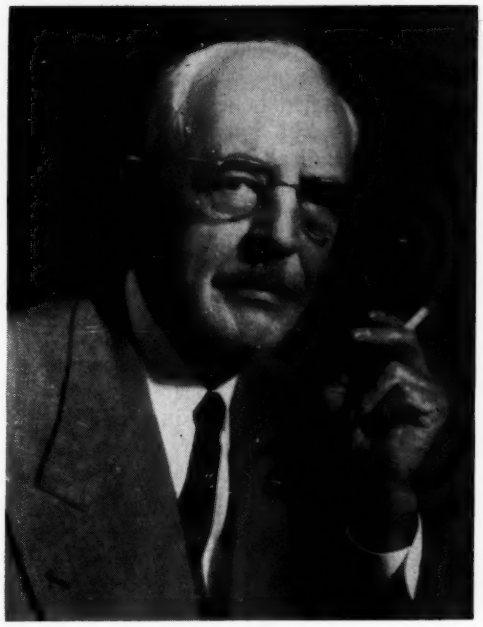
In Memoriam

BUELL H. SPRAGUE

M.D., F.A.C.S., F.I.C.S.

1885-1957

Doctor Buell H. Sprague, the beloved "dean" of Hollywood's surgeons has answered the call for eternal service with the Master Physician of us all. Born in Paulinna, Iowa, Dr. Sprague was graduated from the Sioux City Medical College in 1908. The next twenty-four years were spent in Huron, South Dakota, where he founded and conducted the Sprague Hospital, ministering to that community's medical and surgical needs with such outstanding success that he was granted the honorary degree of Doctor of Letters from Huron College. During World War I Buell served as a First Lieutenant, Medical Corps, U.S. Army, at the Camp Grant, Illinois, base hospital. In Huron he was a charter member of the Rotary Club. In 1926 the American College of Surgeons conferred Fellowship upon Doctor Sprague in recognition of his great ability as a general surgeon.



Buell H. Sprague,
M.D., F.A.C.S., F.I.C.S.

Southern California in general and Hollywood and Burbank in particular were grateful beneficiaries of his superlative surgical skill when he moved to Hollywood in 1932. Within a short time Doctor Sprague was the acknowledged leading surgeon as well as a prominent civic leader. Many honors have come to him over the years here in Southern California: He was Past President of the Hollywood Optimist Club; Past Chief of Staff and member and chairman of numerous committees, such as the executive committee of both the Hollywood-Presbyterian and Saint Joseph's Hospitals, and member of the Los Angeles Surgical Society, the Hollywood Academy of Medicine and Hollywood Post No. 43 of the American Legion.

In keeping with the high ideals that motivated the entire life of Doctor Sprague, he was one of the early Certified Fellows of the United States Section of The International College of Surgeons, as well as one of its stalwart champions over the

years. Doctor Sprague more closely emulated the sterling qualities of Sir William Osler's *Aequanimitas* than any other recent surgeon whom I have known. I have never heard him speak a disparaging word. He practiced the Golden Rule in his day-to-day living. Buell was a humble man, quick to praise the work of others while minimizing the importance of his own surgical contributions. He always had the spirit of genuine Christian love in his heart towards all mankind. Doctor Sprague was a firm believer in the inherent good in all. Yet hypocrisy, selfishness, greed and medical incompetence aroused his righteous indignation and he exerted all his influence for their speedy correction. He would gladly aid anyone in distress at any hour of the day or night irrespective of whether it might cause him great personal inconvenience or rob him of desperately needed rest prior to a day's heavy surgical schedule.

Thus, it was not surprising that Doctor Sprague was the doctors' surgeon. His keen analytical mind would quickly cut through a maze of obscure signs and symptoms and come up with a brilliantly correct diagnosis. His surgical technic was faultless and immaculate, while his dexterity and operative speed were legendary. He was truly a Master Surgeon, whose gentleness in the handling of tissues guaranteed their prompt healing without untoward postoperative sequelae. He was loved by his patients, revered by the hospital nursing staffs and loved and respected by all of his medical colleagues. The financial side of his practice of surgery did not interest him; but rather, he was concerned with restoring promptly to full health those who sought his help. The younger doctors always fascinated Buell and he spent many a happy hour helping them solve their problems, celebrating with them in their triumphs and comforting and advising them in their temporary defeats.

Doctor Sprague's great interest over the years was centered in diseases of both the thyroid gland and the gastrointestinal tract. He made basic and fundamental contributions to the better handling of such diseases. I may precisely state that Buell Sprague taught me many invaluable lessons in surgery that made me a far better surgeon for having benefited from his kindly and valuable suggestions over the many years of our close friendship. He was a believer in simplifying surgical technic and reducing operating time.

He leaves behind his widow, Jeanette—his loving, gracious and charming counterpart who was just as successful as a wife as Buell was in his chosen field. Her host of friends will make this blow a somewhat easier one to bear. The Officers and Members of the United States Section of The International College of Surgeons join the writer in extending most sincere sympathy to Mrs. Sprague and hope that we may all help lighten her present heavy burden.

Doctor Buell Sprague's passing has left a void that can never be filled, but we who were the recipients of his friendship and love have been made far better Doctors of Medicine and our lives have been greatly enriched, so that we are now better able to relieve suffering and prolong life in our fellow men. This will be Doctor Buell Sprague's imperishable living monument erected in the hearts of his family, patients and numerous friends that will endure long after all material monuments and triumphal arches have crumbled to dust and are trodden under the feet of unborn generations to come.

—Donald C. Collins
M.D., F.A.C.S., F.I.C.S.

IN MEMORIAM

HAROLD IRVING LILLIE, M.D., F.A.C.S., F.I.C.S. (Hon.)

1888-1957

Dr. Harold Irving Lillie, former member of the staff of the Mayo Clinic and widely known specialist in diseases of the ear, nose and throat, died at his home in Rochester, Minnesota, on August 27, after a long illness.

Dr. Lillie came to the Mayo Clinic in 1917 and was the first man to head the newly organized Section on Otolaryngology and Rhinology. In 1951 he became a senior consultant. At the time of his retirement from the Mayo Clinic in 1953, he was professor of Otolaryngology and Rhinology in the Mayo Foundation.

Born in Grand Haven, Michigan, in 1888, Dr. Lillie received both his premedical and medical education at the University of Michigan, getting his M.D. degree in 1912. During the next three years he served as an intern in the University of Michigan Hospital, and from 1913 to 1915 was an instructor in otolaryngology in the university's medical school.

From 1915 to 1917, Dr. Lillie lived in Chicago, where he practiced his speciality and was an instructor in otolaryngology at Rush Medical College.

Dr. Lillie was president of the American Rhinological, Laryngological and Otological Society in 1939 and of the American Laryngological Society in 1945 and 1946. He was a fellow of the American College of Surgeons and of the International College of Surgeons, and a member of the Southern Minnesota Medical Association, the Minnesota State Medical Association, Minnesota Academy of Ophthalmology and Otolaryngology, American Academy of Ophthalmology and Otolaryngology, American Otological Society, American Medical Association, Alumni Association of the Mayo Foundation, Alpha Omega Alpha, Society of the Sigma Xi and Phi Beta Pi. He was a life member of the University of Michigan Union.

Dr. Lillie had contributed nearly one hundred papers, chapters and other writings to the medical literature in his specialty.

Always interested in horses, for years Dr. Lillie bred both harness and riding horses and served as an official at local harness races.

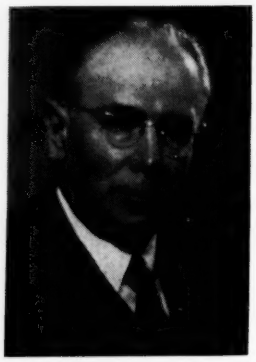
Dr. Lillie is survived by his wife, the former Oda Kittredge, a son, Dr. John C. Lillie, a member of the staff of the Clinic in the section which his father established, a daughter, Mrs. Thomas C. Wilder, of Spokane, Wash., and nine grandchildren.

The International College of Surgeons and the Journal express their grief at the passing of Dr. Lillie and extend to his family and colleagues their very deep sympathy.

IN MEMORIAM

FERIDUN SEVKET EVRENSEL, M.D., F.I.C.S.

1887-1957



Dr. Feridun S. Evrensel, F.I.C.S.

Feridun Sevket Evrensel, M.D., F.I.C.S., was born in Istanbul. After graduating from the Faculty of Medicine he completed his training as a military surgeon and served during the wars of that period on many frontiers and in many hospitals throughout his country.

A revered teacher in his specialty, he was keenly interested in abdominal surgery and was one of the first to perform it in his nation in the early years of the century.

After resigning from military service he worked as a surgeon in hospitals throughout Turkey and in his latter years was director of the surgical clinic, Haydarpaşa Numune Hospital, Istanbul. He retired from this position in 1953.

Dr. Evrensel was a member of the German College of Surgeons, the Italian College of Surgeons and the International Society of Surgeons; he was also a Fellow of the International College of Surgeons, serving as vice-president of the Turkish Section. He held memberships in the Turkish Medical Society, Turkish Surgeons' Society (he was one of its founders) and the Turkish Health Department. For several terms he was chairman of the Turkish Surgeons' Society. His publications were many and his service to his country outstanding. A long and painful disease took his life, earlier this year, and the Fellowship of the College unites in mourning him.

GIAN MARIA GIULIANI, M.D., F.I.C.S.

We regret to announce the death of Prof. Dr. Gian Maria Giuliani, F.I.C.S., Via Roma 10/6, Genova, Italy. He held the position of Primario di Chirurgia, Ospedale Civile di Genova.

COLLEGE INTERNATIONAL DE CHIRURGIENS
GENEVE 35
FOUNDED BY DR. MAX THOREK

The Journal of the International College of Surgeons

FOUNDED BY DR. ANDRE' CROTTI

Section II

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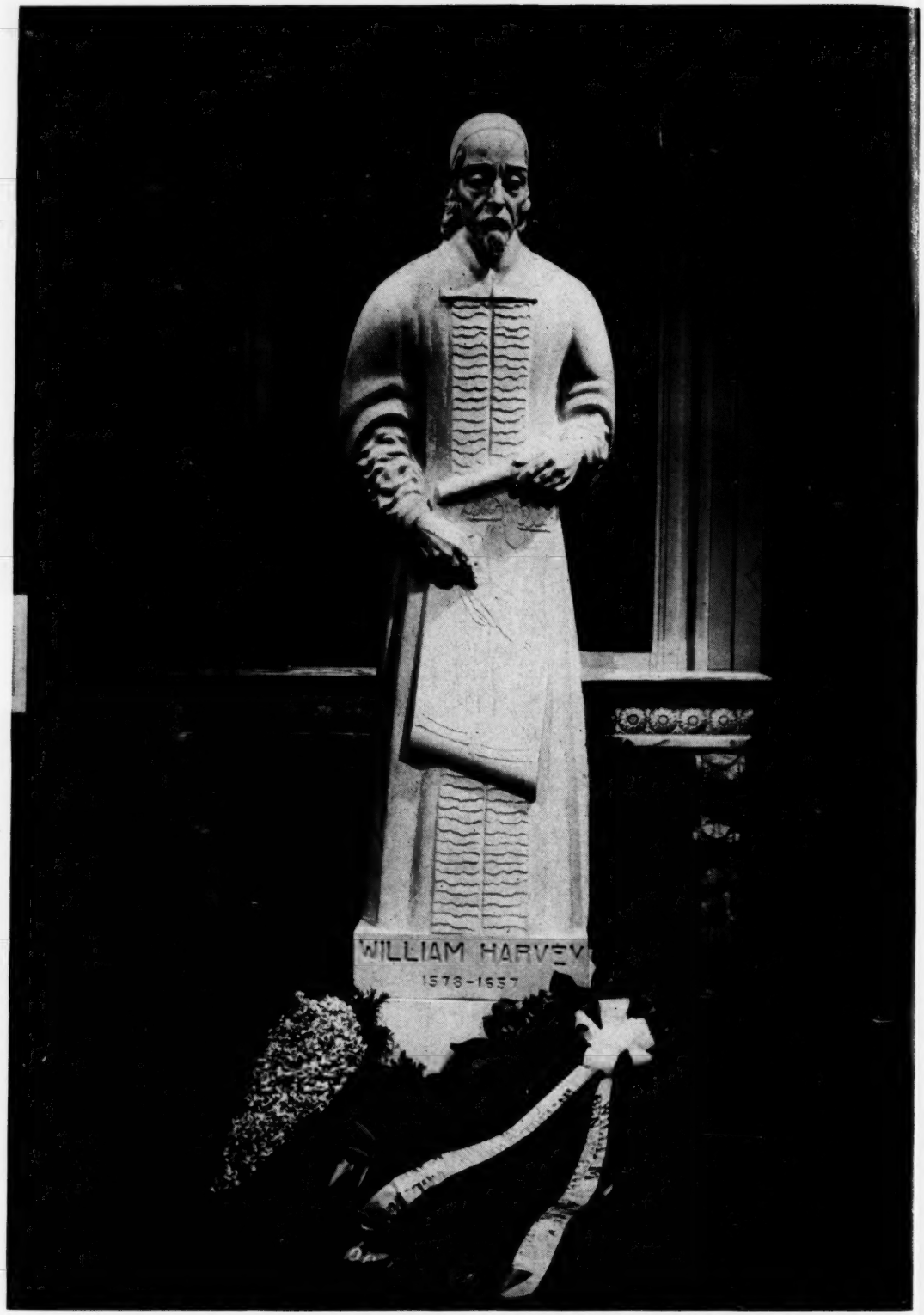


Three hundred years after the death of William Harvey the world of science, medicine, and surgery pays tribute to his memory at his statue in the Speidel Hall of Immortals, the International College of Surgeons' Hall of Fame.

The Twenty-Second Annual Congress

UNITED STATES AND CANADIAN SECTIONS
North American Federation
INTERNATIONAL COLLEGE OF SURGEONS

The Twenty-Second Annual Congress, United States and Canadian Sections (North American Federation), of the International College of Surgeons, held in Chicago, September 8-12, has become part of medical organization history.

Four days, crowded with concurrent sessions and events vying for the interest of Congress participants and visitors, seem, in view of the magnitude and variety of the agenda, a very short time. Nevertheless, through efficient correlation of all the parts, the whole achieved both coherence and significance, shaping itself into a period memorable for solid achievement and genial good fellowship.

Outstanding surgeons and surgeon specialists from all parts of the United States and Canada and distinguished guests from abroad presented a program of broad scientific and technical importance. **Dr. Peter A. Rosi**, F.A.C.S., F.I.C.S., of Chicago, chairman of the program committee, was warmly and repeatedly congratulated upon his committee's excellent judgment and efficiency.

In addition to the general assembly sessions, there were specialized sessions devoted to neurologic surgery, obstetric and gynecologic surgery, occupational surgery, orthopedic surgery, ophthalmologic and otorhinolaryngologic surgery, plastic surgery, protologic surgery, and urologic surgery.

There also was a session for surgical nurses; another for inhalation therapists; and one for hospital supply personnel.

Technical exhibits under the able direction of **William J. Burns** drew a stream of appreciative observers.

Beginning on the Sunday preceding the other formal sessions and running through the entire period of the Congress, a series of postgraduate instructional courses was given by a corps of men eminent both as teachers and as surgeons.

Intent as we were to make use of each moment of the present to help us serve the future, we were not unmindful of our debt of gratitude to the trail blazers of the past. Consequently we took time to go to the International College of Surgeons' Hall of Fame to unveil a portrait of Crawford W. Long and lay wreaths of flowers and of homage at the feet of the statue of William Harvey.

Also, we gathered at a banquet, preceded by a social hour, and gave expression to our feeling of comradeship. We said the thanks due to those whose hard work made our Congress outstanding. We had the privilege of meeting personally the men who had come to us from overseas and of making them our friends forever.

Finally we came together in solemn convocation to bestow deserved honors and to induct into membership the nearly one-thousand candidates for the varied degrees in the International College of Surgeons, and to be addressed by the distinguished United States senator from Minnesota, **Hubert M. Humphrey.**

The ladies had their own program of activities. Some of our visitors remained for a while in Chicago, after the close of the Congress, to observe the medical and surgical facilities of the city as well as to sight-see and further develop the acquaintances so auspiciously begun during the sessions.

International Surgeons' Hall of Fame Scene of Impressive Ceremonies

Dr. A. Hamblin Letton, Regent of the Georgia Chapter of the International College of Surgeons, unveiling the portrait of Dr. Crawford Long, which had been painted by Robert L. Steele, also of Georgia.

Unveiling of Crawford Long Portrait

On the afternoon of Tuesday, September 10, the International Surgeons' Hall of Fame was the scene of two ceremonies which commanded the attention not only of the Congress but of the nation and, indeed, of the world.

Photographers and reporters were on hand to record the proceedings.

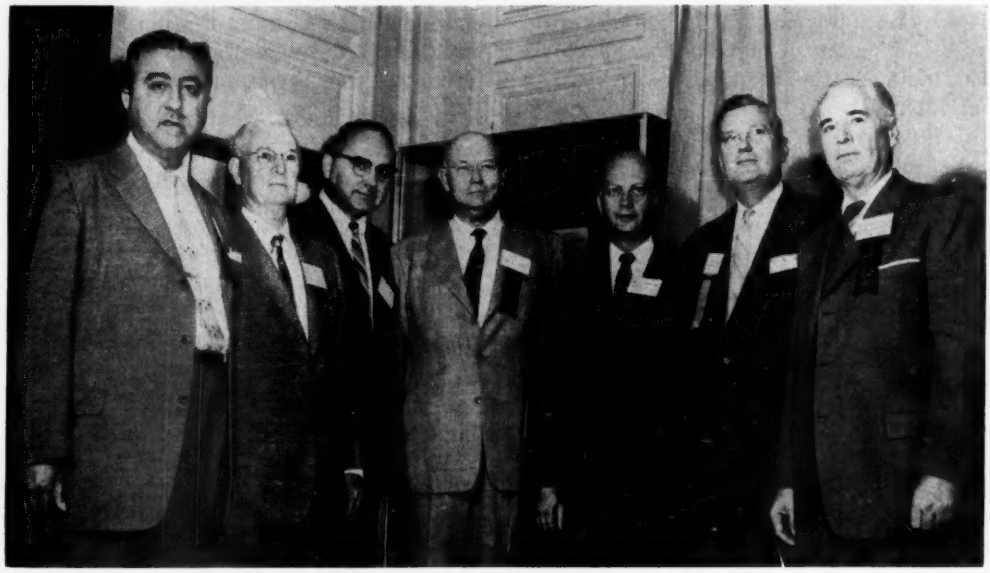
The first ceremony took place in the United States Room of the Hall of Fame. It was the unveiling of the portrait of one of the State of Georgia's foremost sons, Dr. Crawford Williamson Long.

A committee of distinguished Georgians, headed by **Dr. A. Hamblin Letton,** F.A.C.S., F.I.C.S., D.A.B., of Atlanta, and Regent of

the Georgia Chapter of the International College of Surgeons, was at hand to unveil the portrait.

Dr. Letton drew the cord which removed the veil and revealed to the world the face and figure of the pioneer physician, surgeon, and trail blazer in the use of ether as an anesthetic agent in surgery. Dr. Letton then made the following remarks:

"Ladies and gentlemen, it is a great pleasure for us to come today to dedicate this portrait of a great Georgian, a great American, a great international figure. Crawford Long was born in 1815, a third generation Georgian. He studied at the University of Georgia, which, you will recall, is the first land grant college in the United States. Later he went to Transylvania Medical College, in Lexington, Kentucky, and then to the University of Pennsylvania, where he came under the tutelage of Dr. George B. Wood. Dr. Wood's lectures were the pride and joy of the University at that time, and his influence on the students was immense. It was Dr. Wood's passion to imbue in his students the principle that they should never report medical advances prematurely but always have them well founded. This, as years went by, had considerable influence on Dr. Long's life. In 1841, after graduation, Dr. Long went to Jefferson, Georgia. (At this time Atlanta was but four years old. In fact, it wasn't even Atlanta, but was known as Terminus.) There he set up practice, and was immediately liked by all. He spent many hours in the saddle and behind the buckboard of a buggy. It is told of him that even on his wedding day, he was late because he was attending a patient, and as soon as the marriage was over he hopped on his horse and rode off to take care of



Committee of distinguished Georgia surgeons who attended the dedication ceremony: Tofey George Smaha, M.D., Griffin, Georgia; John W. Turner, M.D., Atlanta, Georgia; Leonard J. Rabhan, M.D., Savannah, Georgia; Kenneth S. Hunt, M.D., Griffin, Georgia; William R. Chambers, M.D., Atlanta, Georgia; A. Hamblin Letton, M.D., Atlanta, Georgia; Needham Bateman, M.D. Atlanta, Georgia.

other sick people, leaving the trivialities of a honeymoon to a more convenient time. I tell you this not in jest, but to try to describe to you the devotion of this man to his duty.

"In those days there were not the entertainment facilities of today. There were no movies, television, or radio—not even gramophones. The young people found their amusement in the manner that they could. One of the forms of amusement in that locality was the ether party, at which one of the gang would inhale the vapors of sulphuric ether, and the rest of the group would enjoy his antics. Dr. Long was able to observe something here, something that he felt was important. He realized that occasionally these people would injure themselves, and yet would not feel pain. As Pasteur once stated, 'In the field of observation, chance favors only the prepared mind.' Dr. Long's mind had been prepared. Dr. Long saw the usefulness of ether as an anesthetic agent, and after some months he convinced himself that he could operate with the patient under its influence. It was some months, then, before he found a patient who was willing to submit. Finally, Mr. James Venable, who had a wen on his neck, submitted to the operation, and on March 30, 1842, this momentous occasion took place. Mr. Venable is of the same family which now owns Stone Mountain, Georgia. The operation was successful, with Mr. Venable's stating that he didn't feel a thing. Dr. Long wanted to try this again and again. This he did—again on Mr. Venable, on a colored boy, and on several other occasions as the months and years went by. He didn't report it for several reasons—the first being that he felt he needed more proof, and the second that the matter of sitting down and writing was rather a burdensome one with his active practice of being out on horseback for long periods of time, traveling around the country taking care of sick people.

"While Dr. Long did not report this medically, certainly the word so spread throughout the community of this young doctor who was able to do this marvelous thing of operating on people when they didn't feel it that it was quite the talk of the town. Dr. C. T. Jackson happened to come through on a stagecoach, and you will remember that Jefferson was the overnight stop on the stage between Savannah and the gold fields of Dahlonega. We have writings of Dr. Jackson concerning his trip to Dahlonega. We have no proof that he talked to Dr. Long, but we do know that he must have talked with the people of that area.

"Dr. Jackson and Dr. Morton used this anesthesia. They were able to use it on many more patients than Dr. Long ever could have done. They were able to publicize it as Dr. Long never could have done; therefore, we are very grateful to these gentlemen. However, we are even more grateful to the observing powers, to the courage, of this young Georgia physician, Dr. Crawford Williamson Long, who first gave ether anesthesia on March 30, 1842.

"I do not know what Dr. Long would like for us to say here today, but I rather have the feeling that he would like for us to bow our heads and say, 'Oh Lord, we appreciate the many blessings that Thou hast bestowed upon us. We appreciate the privilege of caring for the sick. Our God, we are such sinners that we can't be really devoted followers of Thine, and yet we are such devotees of Thy ways that we don't really enjoy sinning. Our only hope lies in Thy help. We would ask that Thou would keep us ever mindful that the laying on of the hands requires that the surgeon's hands be clean and his thoughts noble. Amen.'

"It is thus, gentlemen, that we dedicate this picture to the honor of a great man—that it may inspire generations to come. Thank you."

Harvey Tercentenary Celebration

The climax of the ceremonies of the afternoon of Tuesday, September 10, was the tribute to the memory of William Harvey. In the Speidel Hall of Immortals, at the foot of the statue of the discoverer of the circulation of blood, wreaths were placed and addresses made commemorative of the three-hundredth anniversary of his death.

Ilza Veith, M.A., Ph.D., Associate Professor of the History of Medicine at the University of Chicago, made the introductory remarks, saying:

"It is most certainly no exaggeration to say that even those physicians whose interest in medical history has never been awakened know that it was William Harvey who discovered the circulation of the blood; and few persons within the field of medicine are still unaware that this is the tercentenary year of the death of William Harvey. This anniversary is being recognized all over the world. Major commemorative events have been held in London and Folkestone, in New York and Los Angeles, and many others are still to follow. It is particularly fitting that the surgeons, too, are participating in this important celebration. Hardly any other branch of medicine has benefited more directly by Harvey's great discovery than has the field of surgery. Moreover, Harvey's discovery, inspired in Italy, completed in England, first published in Germany, and applied all over the earth, is a symbol of science which transcends national boundaries and belongs to the world. This symbol is also the *leitmotiv* of the Hall of Fame of the International College of Surgeons, for it too bows before achievement and not boundary; it bows before humanity and not nationality.

"William Harvey, whom we are honoring today, was a man of many virtues and accomplishments. He was born in 1578 in Folkestone, England, where his father later became Mayor, and during his 80 years of productive life he saw the rise of England during the reign of the first Queen Elizabeth and its decline into anarchy during the Great Rebellion. His studies took him first to King's College, Canterbury, and then to Gonville and Caius College in Cambridge and finally, at the age of 20, he went to Padua to become

Dr. Ilza Veith, professor of history, University of Chicago; Dr. Max Thorek, Founder of the International College of Surgeons; Dr. William M. Crawford, of Fort Worth, Texas, personal emissary of the Harveian Society of London; and Dr. Claude S. Beck, of Cleveland, eminent cardiac surgeon, with symbolic floral heart, half red and half purple, gift of the Harveian Society.

Dr. Henry W. Meyerding, President-Elect; Dr. Max Thorek, Founder; Mr. Edwin Speidel, Honorary Member; and Admiral Ross T. McIntire, Executive Director, International College of Surgeons, with wreath of laurel and roses—the tribute of the College.

the pupil of the great Fabricius of Aquapendente. It was there that he first conceived his interest into the mystery of the movement of the blood and it was also in Padua that he gained a scientific reputation that helped him to become associated with the Royal College of Physicians in 1604 immediately on his return from Italy. He was honored with the appointment as Lumleian Lecturer in 1615 and shortly thereafter announced his views on the circulation of the blood. It is significant and instructive that he postponed the publication of this momentous discovery until 1628. During the intervening 13 years he conducted the many experiments that proved his findings beyond any doubt. Although Harvey's fame is mostly associated

with his discovery of the circulation of the blood, it is well to remember that he also was the author of an important publication on embryology entitled *De Generatione.* It is further worthy of note that neither Harvey's prominent position nor his thorough documentation prevented him from being attacked by critics of his views on circulation, for the old ideas on the movement of the blood died slowly. In meeting these critics he published in 1649 another treatise called *De Circulatione.* Harvey retained his Lumleian Lectureship until 1656, a year before he died. Although his fame continued to be great in England it was not until the year 1831 that the Harveian Society was founded. It received its name in token of a resolution 'strictly to adhere to the course of observation and induction so successfully pursued by the illustrious discoverer of the circulation of the blood'."

A cable had come from **Mr. A. Dickson Wright,** M.S., Fellow and President of the Royal College of Surgeons, President of the Harveian Society of London, who had served also as President of the Harvey Tercentenary Congress in London. The cable read:

HARVEY SOCIETY OF LONDON DEEPLY SENSIBLE OF FINE TRIBUTE YOU PAY OUR HERO STOP MAY HIS MOTU CORDIS BECOME FOR YOU A MOTU-SPIRITUS AS IT HAS FOR US STOP ABUNDANT PROOF EXISTS THAT HARVEY WAS AT HEART A SURGEON

Dr. William M. Crawford, of Fort Worth, Texas, a personal emissary of the Harveian Society, acting on behalf of Mr. Dickson Wright, placed a floral heart at the foot of the statue of Harvey. The arterial blood of the heart was symbolized by red flowers, the venous by blue. Dr. Crawford was accompanied by **Mr. Robert White Mason,** Consul General of Great Britain, and by **Mr. Edwin Speidel,** Honorary Member, International College of Surgeons, benefactor and donor of the Hall of the Immortals.

Dr. William M. Crawford presenting Dr. Max Thorek with Harvey Commemorative Medal.

A second wreath, from the International College of Surgeons, expressed the homage of the world of surgery.

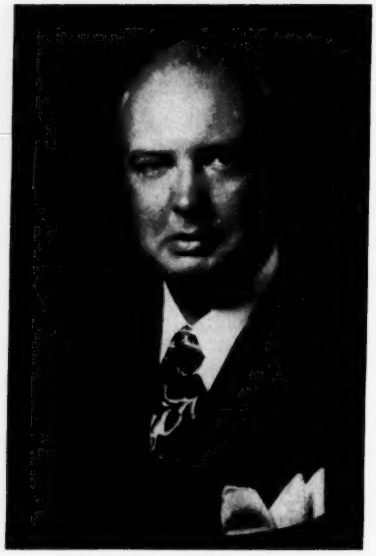
Admiral Ross T. McIntire, Executive Director, **Dr. Henry W. Meyerding,** President-Elect, and **Dr. Max Thorek,** Founder, officially represented the International College of Surgeons. **Dr. Claude S. Beck,** eminent cardiac surgeon, of Cleveland, Ohio, and Dr. Ilza Veith, at the invitation of the College, also took part in the ceremony.

Following the wreath-laying, Dr. Crawford presented Dr. Thorek with a special medal from the Harveian Society in commemoration of the Tercentenary Celebration.

The following morning, Wednesday, September 11, the General Assembly of the Congress, meeting in the Grand Ballroom of the Palmer House, with **Morris Fishbein,** M.D., F.I.C.S. (Hon.), Chicago, presiding, and **George J. Strean,** M.D., F.A.C.S., F.I.C.S., Montreal, Canada, acting as secretary, opened with a series of papers on William Harvey.

Dr. Austin Smith

The Heart of the Problem



Dr. Austin Smith

Austin Smith, M.D., C.M., M.Sc., F.I.C.S. (Hon.), Editor of the Journal of the American Medical Association, Chicago, in a stimulating address, *The Heart of the Problem,* drew a comparison between the problems that faced William Harvey and those that beset us today.

We quote the following excerpt:

"Harvey was a master of deduction and a keen observer. He also was aware of the risks of going contrary to the opinion of his colleagues and the public. If he were here today, he might comment on how familiar some problems seem to him. He probably, though, would be startled at the breadth and depth of some of our modern accomplishments. But I believe his basic ability to observe and deduce would carry him quickly from perplexity to knowledge. Today we are still lacking enough researchers, we are still lacking a ready acceptance of the proved, we are still facing a desire in some instances to accept the unproved. Today we still lack adequate funds for those who can do research, although in some instances some, not necessarily the most able, occasionally appear to have more funds than they need. Today we must be concerned about public opinion, although I doubt if Harvey in his time had to worry as much as we do about public clamor for information on what is new. Today we have to worry about medical and research centers. So did Harvey and his colleagues. They did not, though, face the problem of acquiring adequately trained and sympathetically inclined administrators for hospitals and research centers. Nor were they concerned about a growing utilization of research talent by government and by industry. They were concerned about adequate teaching material. So are we today. They were concerned about exposure of quackery by the development of sound studies. So are we today. They were concerned about the need for more adequate research tools. So are we today. In other words, three hundred years ago, just as today, scientists and practitioners were being taught to seek the truth.

"Why mention such obvious things to the members of this audience? For one simple reason—to remind you of the many ways in which you as individuals or collectively through organizations such as the International College of Surgeons, or the World Medical Association, or your national medical associations, or any other way, can exert sound influence. You have the opportunity of providing leadership. You have the opportunity of influencing others. You can administer to the sick.

You can persuade others to follow your calling. You can obtain support to permit the continuation, even broadening, of this calling. At times, however, we do not use this influence. Perhaps the mere setting of an example is sufficient. Perhaps a word here and there would suffice. Perhaps, at times, however, it is necessary to forcefully exert oneself or urge a group to do it. It makes no difference, really, how the change comes about; the important thing is to stand up and be counted to help bring about this movement—or even to preserve that which is good but which is in danger of being lost. Surgeons cannot tolerate quackery. Nor can they tolerate fuzzy thinking. Too many lives are at stake. Harvey apparently could not tolerate fuzzy thinking or deceptive practices or inadequate research.

"Are things basically changed, then, over three hundred years? Perhaps what we utilize and what we know is different, but we still are seeking the truth. We are still anxious to move on to new findings, new applications of medical knowledge. In this respect we do not differ from Harvey. And perhaps that is the very heart of the problem of doing the best with what we have. To do this we must seek the truth and having obtained it we must insist on its application. If truth is our objective, freedom to apply it should also be pursued. But to apply it, we need understanding, tolerance, and help from medical colleagues, from others in the health field, and from those who reap the benefits of advancing health knowledge. Thus the surgeon today cannot confine himself to the techniques of surgery. He is exposed to and must respond to the pressures exerted by the influences mentioned earlier in my remarks. He is and must be, then, not only a good doctor but a leader in medical and public affairs because they cut squarely across the way he learns and applies new surgical techniques. He may appear at times to stand alone, but he never is isolated. His opinions are important, and they are influential. His advice is needed, and his guidance should be offered even when not sought. This was the way Harvey made his way. Does it differ in principle from the way you and I must follow three hundred years later? I don't think so."

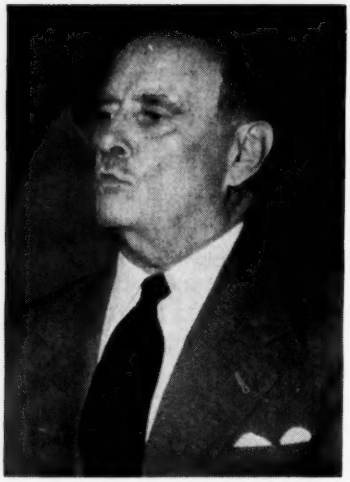
Dr. Francisco Grana

The Predecessors of Harvey

Prof. Dr. Francisco Grana, F.A.C.S., F.I.C.S. (Hon.), of Lima, Peru; Former Head of Department and Professor of Surgery, San Marcos University, Lima; Past President, International College of Surgeons; President, Peruvian Section, International College of Surgeons, in a brilliant paper dealing with *The Predecessors of Harvey,* traced the development of medical knowledge throughout the world and throughout history, noting here and there the intuitive, perhaps deductive, guesses at, or glimpses of, the circulation of the blood.

In Egypt, Dr. Grana noted, in the Ebers Papyrus it is categorically stated, "The heart is the center of the blood circulation."

The ancient Chinese were aware that "vital phenomena depend on the connection of certain principles to the blood circulat-



Prof. Dr. Francisco Grana
A.M.A. (Hon.,) F.A.C.S., F.I.C.S. (Hon.)

ing through communication channels," and established a diagnostic system founded on pulse characteristics.

In Greece, Hippocrates observed, "The pneuma, the warm vital principle penetrating through the trachea, and joining all parts of the organism amongst them, has its seat in the heart. The blood accumulates in the liver, and carries the heat to the left heart and maintains it constant."

During the Alexandrian period Erasistratus held the theory that air penetrates through the lungs to the heart, transforming itself into a vital spirit which is then conducted through the arteries to all the other parts of the body. He also hinted that the intercommunication of the blood between the veins and the arteries was effected through very fine vessels. He described the tricusp and the bicusp valves and stated that the bicusp valve prevented the blood from leaving the heart in any way other than through the aorta.

No observable development of any of these ideas took place in Roman times, and the authority of Galen put the seal upon many misconceptions which retarded further investigation. Nor did the brilliant Byzantine culture advance medical science. During the period of Arab ascendancy in medicine Ybn An-Nafis reasoned that blood must course through the lungs, but his argument was rejected and forgotten.

It was of course the Renaissance that brought a transformation into medical science, particularly through the study of anatomy. Old concepts were vigorously destroyed and new investigations begun, most fruitfully so perhaps in the field of physiology. Much was learned of the heart. The valves were examined and their function arrived at.

Michael Servet, the stormy multi-sided genius, described pulmonary circulation with an astounding degree of perspicacity. But he was involved in the religious strife which was then tearing Europe apart, and was burned at the stake in Geneva. Later on, Realdo Columbus and his pupil Cesalpino made further investigations into the circulatory system, but their findings continued to be largely ignored.

Such were the often brilliant but ineffectual anticipations that preceded the epoch-making discoveries of William Harvey concerning the circulation of the blood.

Dr. Grana's purpose, he concluded, modestly, was to point to the merits of the forerunners of the illustrious William Harvey and to do them justice. But in a comparison of their work with Harvey's, the latter's transcendent genius shines forth as a guiding light to the future.

Actually, Dr. Grana's paper was a most thorough and eloquent presentation of a fascinating subject.

"Genius," said Dr. Grana, "is a lonely voice that speaks in behalf of a people, a race, or in behalf of nature. Hippocrates spoke in behalf of the noblest of the sciences, and the echo of his voice is still heard, more than twenty centuries later, sonorous and convincing."

Dr. Leopold Schönbauer

Harvey in the History of Medicine

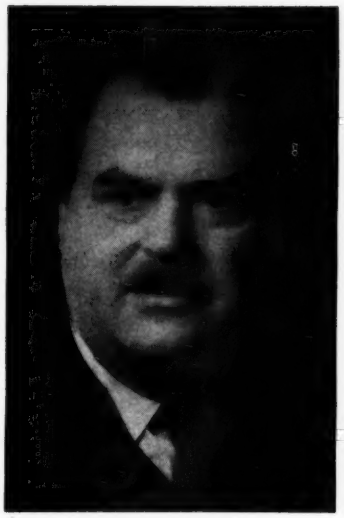
Prof. Dr. Leopold Schönbauer, F.I.C.S. (Hon.), Chairman, Department of Surgery, University of Vienna; President of Medical Historical Society of Vienna; President, Austrian Section, International College of Surgeons, presented a most scholarly analysis of the development of knowledge concerning blood and its function up to the time of Harvey and then evaluated Harvey's contribution. He quoted Albrecht von Haller to the effect that next to Hippocrates, William Harvey was the greatest figure in the history of medicine, and went on to say:

"Harvey's discovery—the circulation of the blood—transformed the very fabric of medicine. Indeed, it can be said that his discovery led medicine out of the stultifying narrow-mindedness of the Middle Ages into a new era dominated by a consecrated and successful drive to observe, and, having observed, correctly to understand and account for the findings. Functional thinking, in the realm of Medicine, owes its first great triumph to William Harvey. From his day on, it was able successfully to assert itself."

Dr. Schönbauer had prepared a series of drawings which he projected on a screen to trace the previously held ideas which Harvey's theory had to confront. He thus dramatically established the fundamental significance of Harvey's work.

After granting due credit to Harvey's precursors in the study of the circulation of blood, Dr. Schönbauer concluded:

"The definitive demonstration of blood circulation was left for Harvey to give. In the first place, he grasped the biological, the functional, problem, and proceeded to give it a solution by ingenious and brilliantly thought-out experiments designed for the express purpose of observing the natural processes. He recognized that the whole of the blood passes from the systemic arteries, through the 'parenchyma,' to the corresponding veins, by means of which it makes return to the right atrium. He showed how the heart empties following ligation of the vena cava, how the extremities wither following clamping off the artery which goes to each of them. In a later talk with Boyle, he indicated that the venous valves, as described by his master Fabricius, had led him to discover the circulation of the blood. Upon learning of these valves, which allowed the blood to flow back to the heart, but prevented its motion in the opposite direction, he sought a reason why. There was no other acceptable answer; after the blood had coursed through the limbs, it had to return by way of the veins."



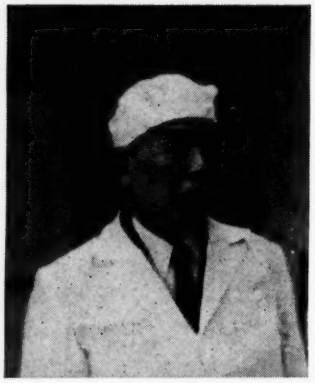
Prof. Dr. Leopold Schönbauer
F.I.C.S. (Hon.)

Dr. Schönbauer then spoke of Marcello Malpighi's discovery of the capillaries. He further discussed the facts of Harvey's life, and concluded with this statement:

"With Harvey there died three hundred years ago a vivid personality significant in the entire history of medicine and particularly in the evolution of the practice of surgery both for the basic contribution and for the direction in which it developed."

Dr. Hiroshige Shiota

Harvey's Contribution to Science



Prof. Dr. Hiroshige Shiota F.I.C.S.

Prof. Dr. Hiroshige Shiota, F.I.C.S., President of the Nippon Medical School, in Tokyo, presented a most moving tribute to the memory of William Harvey, outlining his many contributions to science, and closing with a discussion of the impact which European science had on medical practice in Japan.

Medicine, said Prof. Shiota, in Japan was Chinese in origin. Little had been thought about the circulation of the blood. But when, in 1856, Commodore Perry, of the United States, came to Uraga and opened Japan to western influences, modern science came over in a great flood, and with it knowledge of the circulation of blood. Children in the grammar schools of Japan are now taught facts which were first observed by Harvey more than three hundred years ago. Harvey's spirit of probing things to the bottom is a guide to the scientific work of the Japanese.

"Today," Dr. Shiota stated, "the English Harvey is among us—the Japanese."

Harvey Memorial Symposium

The Congress dedicated its series of papers and discussions dealing with the cardio-vascular system to the memory of William Harvey. Most of the papers will appear in forthcoming issues of the Journal of the International College of Surgeons.

The list of essayists and their subjects included:

Surgery of Cerebral Aneurysms

Dr. Raoul F. Matera, F.I.C.S., Buenos Aires, Argentina; Professor of Neurosurgery, University of Buenos Aires.

Prevention and Treatment of Postoperative Thrombophlebitis; Phlebothrombosis and Pulmonary Embolus

Charles P. Mathe, M.D., F.A.C.S., LL.D., F.I.C.S., San Francisco; Urologist-in-Chief, St. Mary's Hospital.

SYMPOSIUM ON VASCULAR SURGERY

Moderator: Raymond W. McNealy, M.D., F.A.C.S., F.I.C.S. (Hon.), Chicago; Emeritus Professor of Surgery, Northwestern University Medical School; Professor of Surgery, Cook County Graduate School of Medicine; Chief Surgeon, Chicago Wesley Memorial Hospital.

Autoplastic Skin Vascular Graft as a Prosthesis in Vascular Surgery

Marvin Wagner, M.Sc., M.D., F.A.C.S., F.I.C.S., Milwaukee; Associate, Department of Anatomy and Clinical Instructor in Surgery, Marquette University School of Medicine, Milwaukee; Attending Staff, Milwaukee General and St. Michael Hospitals; Associate Attending Staff, Evangelical Deaconess and Mt. Sinai Hospitals.

Clinical Results, Occlusive Diseases of the Aorta and Its Branches

John P. Heaney, M.D., D.A.B., F.A.C.S., San Antonio, Texas; Assistant Clinical Professor of Surgery, Baylor University and University of Texas Postgraduate Division; Consultant, General Surgery, Robert B. Green Memorial Hospital; Thoracic Surgical Consultant, Lackland Air Force Base and Veterans Administration Hospital, Kerrville.

Lumbar and Subdiaphragmatic Aortography

Dr. Werner Hagmaier, Schopfheim/Baden, Germany; Chief Surgeon, Staat Krankenhauser.

Selection of Patients and Types of Grafts in Aortic and Arterial Replacement

Gerald H. Pratt, M.D., F.A.C.S., F.I.C.S., New York; Associate Clinical Professor of Surgery, New York University College of Medicine; Attending Surgeon and Chief, Cardiovascular Surgical Section, Saint Vincent's Hospital; Consultant to U. S. Naval Hospitals.

Intramyocardial Implantation of the Internal Mammary Artery

Felix L. Pearl, M.D., F.A.C.S., F.I.C.S., San Francisco; Chief of Vascular Surgery, Director of Surgical Research, Mount Zion Hospital.

The Treatment of Coronary Artery Insufficiency by Internal Mammary Artery Implantation, Seven-Year Study

Arthur M. Vineberg, M.D., M.Sc., Ph.D., F.A.C.S., Montreal, Quebec; Lecturer in Surgery, McGill University Medical School; Director of Cardio-Thoracic Surgery and Senior Surgeon, Montreal Jewish General Hospital; Surgical Consultant, Institute of Cardiology.

Ligation of the Internal Mammary Arteries in the Surgical Treatment of Coronary Insufficiency

Professor Dr. Mario Battezzati, F.I.C.S., Parma, Italy; Director, Institute of Pathologic Surgery, University of Parma.

The Accomplishments of Surgery in the Management of Valvular Heart Disease

Charles P. Bailey, M.D., F.A.C.S., F.I.C.S., Philadelphia; Professor and Head, Department of Thoracic Surgery, Hahnemann Medical College and Hospital; Attending Thoracic Surgeon, Doctors Hospital.

Surgical Operations for Coronary Artery Disease—New Physiology

Claude S. Beck, M.D., Sc.D., F.A.C.S., Cleveland; Professor of Cardiovascular Surgery, Western Reserve University School of Medicine; Associate Surgeon, University Hospitals; Chief Consulting Neurosurgeon, Crile Veterans Administration Hospital; Cardiac Consultant, Mount Sinai Hospital.

Experimental Transplantation of the Heart

Edgar F. Berman, M.D., F.A.C.S., F.I.C.S., Baltimore; Staff Surgeon, Johns Hopkins Hospital; Attending Surgeon, Mount Sinai Hospital.

Mauricio Golberg, M.D., Argentina; Fellow in Surgery, Sinai Hospital.

Leonard Akman, M.D., Baltimore; Chief, Department of Cardiology, Sinai Hospital.

Film—The Treatment of Coronary Artery Insufficiency by Internal Mammary Artery Implantation, Seven-Year Study

Arthur M. Vineberg, M.D., M.Sc., Ph.D., F.A.C.S., Montreal, Quebec.

SYMPOSIUM ON OPEN HEART SURGERY

Moderator: Arthur M. Vineberg, M.D., M.Sc., Ph.D., F.A.C.S., Montreal, Quebec; Lecturer in Surgery, McGill University Medical School; Director of Cardio-Thoracic Surgery and Senior Surgeon, Montreal Jewish General Hospital; Surgical Consultant, Institute of Cardiology.

Open Cardiac Surgery Under Selective Brain Cooling

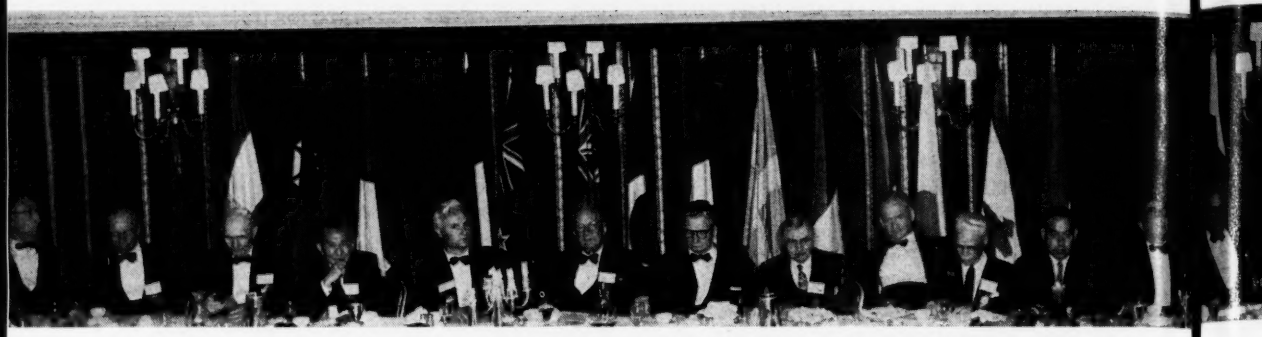
Dr. Kazumi Taguchi, M.D., Ph.D., Okayama-shi, Japan; Assistant Professor of Surgery, Chief of Cardiac Division, Okayama University Medical School.

Intracardiac Surgery with Improved Heart-Lung Machine—Studies on the Cardioscope

Professor Dr. Shigeru Sakakibara, M.D., F.I.C.S., Tokyo, Japan; Professor of Surgery, Tokyo Women's Medical College.

Physiobiologics—Basis for Protection and Cardiac Reanimation During Operations at Normal Temperatures and Hypothermy

Dr. Henri Laborit, F.I.C.S., Paris, France; Director, Experimental and Clinical Research on Artificial Hibernation, Army Research Center, General Military Hospital, Val de Grace; Introducer of Hypothermia.



BANQUET SPEAKERS AND GUESTS OF HONOR: **Dr. Oscar Nugent, Chicago; Dr. Clement Martin, Chicago; Dr. Gilbert Douglas, Birmingham, Alabama; Dr. Arthur Woo, Hong Kong; Dr. Werner Hagmaier, Schopfheim/Baden, Germany; Mr. Edwin Speidel, Providence, Rhode Island; Dr. Eward Compere, Chicago; Dr. Arthur Steindler, Iowa City, Iowa; Dr. William Mengert, Chicago; Prof. César Pantoja, Bogotá, Colombia; Prof. Alfonso de la Fuente, Madrid; Prof. Manuel A. Manzanilla, México; Dr. Moses Behrend, Philadelphia.**

Extracorporeal Circulation for Complete Bypass of the Heart and Lungs in Experimental Open Cardiac Surgery

Gerald H. Pratt, M.D., F.A.C.S., F.I.C.S., New York; Associate Clinical Professor of Surgery, New York University College of Medicine; Attending Surgeon and Chief, Cardiovascular Surgical Section, Saint Vincent's Hospital; Consultant to U. S. Naval Hospitals.

SESSION FOR SURGICAL NURSES

Presiding: Margaret Young, R.N.

Open Cardiac Surgery

Gerald H. Pratt, M.D., F.A.C.S., F.I.C.S., New York; Associate Clinical Professor of Surgery, New York University College of Medicine; Attending Surgeon and Chief, Cardiovascular Surgical Section, Saint Vincent's Hospital; Consultant to U. S. Naval Hospitals.

Dr. Percival Bailey Honored at Luncheon

A Luncheon was given on Tuesday in honor of **Professor Percival Bailey** of Chicago, who received an Honorary Fellowship in the International College of Surgeons in recognition of his contribution to Neurology and Neurologic Surgery.

Surgical Motion Pictures

Almost continuously throughout the sessions a score of extraordinarily fine surgical motion pictures and a special film program were shown.

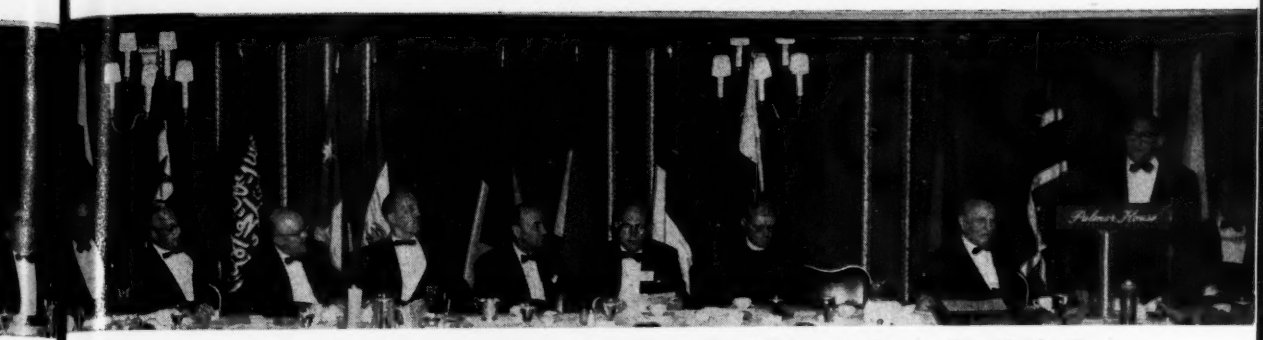
Dr. Jerome J. Moses, F.A.C.S., F.I.C.S., Chicago, was chairman of the Surgical Motion Picture Program; **Dr. Seymour W. Meyer,** F.A.C.S., F.I.C.S., New York, and **Dr. Adolph M. Maller,** F.I.C.S., Chicago, were Co-Chairmen.

Among the pictures shown were:

Typical Rhinoplasty—Albert P. Seltzer, M.D., Philadelphia.

Radical Resection of Superior Maxilla and Orbit With Early Prosthetic Restoration—Veterans Administration.

Structure and Function of the Middle Ear—Professor Dr. Ichiro Kirikae, Tokyo, Japan.



BANQUET SPEAKERS AND GUESTS OF HONOR (CONTINUED FROM PRECEDING PAGE): **Dr. Claude Hunt, Kansas City, Missouri; Dr. Arnold Jackson, Madison, Wisconsin; Dr. Henry W. Meyerding, Rochester, Minnesota; Dr. Ralph Coffey, Kansas City, Missouri; Dr. Peter Rosi, Chicago; Dr. Ross T. McIntire, Chicago; Rev. Jeremiah O'Callaghan, Chicago; Dr. Max Thorek, Chicago; Dr. Morris Fishbein, Chicago; Dr. Raymond McNealy, Chicago.** (CONTINUED ON NEXT PAGE)

Tracheo-Esophageal Fistula—Philip Thorek, M.D., Chicago.

Intra-Cardiac Surgery with Use of Improved Heart-Lung Machine—Professor Dr. Shigeru Sakakibara, Tokyo, Japan.

Relief of Obstruction of Superior Vena Cava by Venous Autograft—C. R. Hanlon, M.D., and J. E. Lewis, Jr., M.D., American Cyanamid Company, C-S 674.

Dr. Philip Thorek, F.A.C.S., F.I.C.S., D.A.B.

Pancreatico-Duodenectomy—J. A. McLeod, M.D., Orlando, Florida.

Replacement of Abdominal Aorta with Homo Transplant—Veterans Administration.

Surgical Exploration for Obscure Massive Gastro-Intestinal Hemorrhage—American Cyanamid Company, C-S 671.

Vagotomy, Pyloroplasty and Supra-Antral Segmental Gastrectomy for Duodenal Ulcer—American Cyanamid Company, C-S 668.

Cancer of the Urinary Bladder—Panel Presentation of the American Cancer Society.

The Management of Advanced Cancer—Panel Presentation of the American Cancer Society.

Treatment of Open Hand Injuries—Mr. Patrick Clarkson, Guy's Hospital, London, England.

One of the films which attracted a great deal of attention was that on Tracheo-Esophageal Fistula, shown by **Dr. Philip Thorek,** of Chicago. This film won first prize for surgical films in Cannes, France, earlier this year. It shows pre-operative and post-operative films as well as an excellent series of diagrams, by Carl Linden, of the surgical procedure. The surgery is well demonstrated. Close-ups and enlargements make this an outstanding teaching film.

BANQUET SPEAKERS AND GUESTS OF HONOR (CONTINUED FROM PRECEDING PAGE): Dr. Austin Smith, Chicago; Dr. David Allman, Atlantic City, New Jersey; Dr. Karl A. Meyer, Chicago; Dr. Francis Lederer, Chicago; Dr. George Lull, Chicago; Dr. Curtice Rosser, Dallas; Dr. R. M. H. Power, Montreal; Dr. Lyon H. Appleby, Vancouver; Dr. E. N. C. McAmmond, Vancouver; Dr. Jean-Paul Legault, Montreal; Dr. Jacques Gauthier, Montreal.

BANQUET

Twenty-Second Annual Congress United States and Canadian Sections

The Banquet of the Twenty-Second Annual Congress of the United States and Canadian Sections of the International College of Surgeons was held in the Grand Ball Room of the Palmer House, on Wednesday evening, September 11.

It was preceded by a reception and social hour tendered by **Mr. Edwin Speidel,** Honorary Member of the College.

Dr. Raymond W. McNealy, F.A.C.S., F.I.C.S., Chicago, General Chairman of the Congress, opened the proceedings, and introduced **Dr. Morris Fishbein,** toastmaster of the evening.

Dr. Fishbein, quoting from an advertisement (copyrighted by the Cadillac Motor Car Company), which appeared in the Saturday Evening Post, January 2, 1915, and was entitled *The Penalty of Leadership,* stated:

"In every field of human endeavor, he that is first must perpetually live in the white light of publicity. Whether the leadership be vested in a man or in a manufactured product, emulation and envy are ever at work. In art, in literature, in music, in industry, the reward and the punishment are always the same. The reward is widespread recognition; the punishment, fierce denial and detraction. When a man's work becomes a standard for the whole world, it also becomes a target for the shafts of the envious few. If his work be merely mediocre, he will be left severely alone—if he achieve a masterpiece, it will set a million tongues a-wagging. Jealousy does not protrude its forked tongue at the artist who produces a commonplace painting. Whatsoever you write, or paint, or play, or sing, or build, no one will strive to surpass or to slander you, unless your work be stamped with the seal of genius. Long, long after a great work or a good work has been done, those who are disappointed or envious continue to cry out that it cannot be done. Spiteful little voices in the

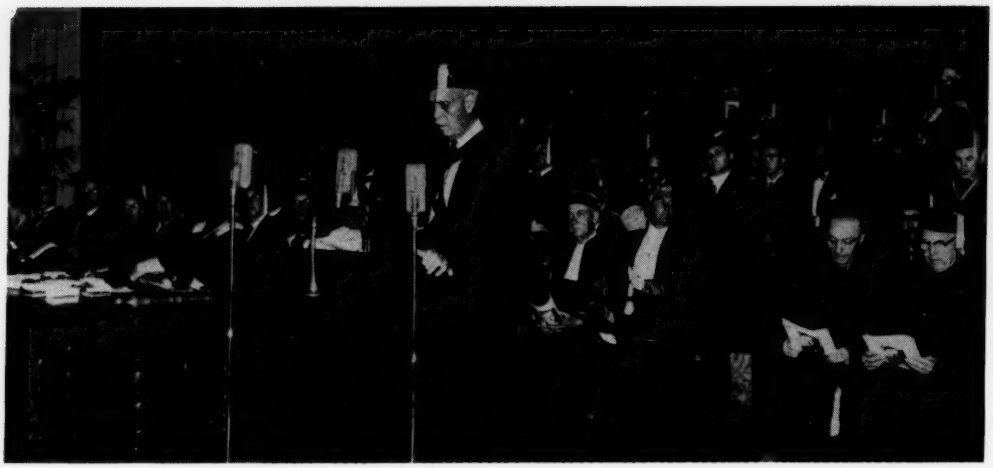
BANQUET SPEAKERS AND GUESTS OF HONOR (CONTINUED FROM PRECEDING PAGE): Dr. Harry E. Bacon, Philadelphia; Dr. Percival Bailey, Chicago; Dr. Henri-Marie Laborit, Paris; Prof. Jorge Taiana, Buenos Aires; Prof. I. Boerema, Amsterdam; Prof. van B. Bastiaanse, Amsterdam; Dr. George S rean, Montreal; Prof. Juan Netto, Asunción, Paraguay; Prof. Fernando Montero, Asunción, Paraguay; Prof. Juan Mora, México; Dr. Shigeru Sakakibara, Tokyo.

domain of art were raised against our own Whistler as a mountebank, long after the big world had acclaimed him its greatest artistic genius. Multitudes flocked to Bayreuth to worship at the musical shrine of Wagner, while the little group of those whom he had dethroned and displaced argued angrily that he was no musician at all. The little world continued to protest that Fulton could never build a steamboat, while the big world flocked to the river banks to see his boat steam by. The leader is assailed because he is a leader, and the effort to equal him is merely added proof of that leadership. Failing to equal or to excel, the follower seeks to depreciate and to destroy—but only confirms once more the superiority of that which he strives to supplant. There is nothing new to this. It is as old as the world and as old as the human passions—envy, fear, greed, ambition, and the desire to surpass. And it all avails nothing. If the leader truly leads, he remains—the leader. Master-poet, master-painter, master-workman, each in his turn is assailed, and each holds his laurels through the ages. That which is good or great makes itself known, no matter how loud the clamor of denial. That which deserves to live—lives."

The American Medical Society of Vienna, through the intermediacy of **Dr. Austin Smith,** Editor of the Journal of the American Medical Association, presented honor keys to **Dr. David B. Allman,** F.A.C.S., F.I.C.S., President of the American Medical Association; **Dr. Karl A. Meyer,** F.A.C.S., F.I.C.S., Northwestern University, Chief Surgeon, Cook County Hospital, and Head of Cook County Medical Institutions; and **Dr. Francis L. Lederer,** F.A.C.S., F.I.C.S., D.A.B., Professor and Head of the Department of Otolaryngology, University of Illinois. A Plaque of Appreciation was presented to **Dr. Horace E. Turner,** F.A.C.S., F.I.C.S., of the University of Illinois, Chairman of the Convocation Committee.

Dr. Max Thorek, Founder of the International College of Surgeons, introduced the essayists, guests, delegates, and representatives from Argentina, Austria, Brazil, Canada, Colombia, England, France, Germany, Hong Kong, India, Italy, Japan, Mexico, The Netherlands, Paraguay, Peru, The Philippines, Spain, and the United States of America.

Dr. Chester W. Trowbridge, F.A.C.S., F.I.C.S., of Oak Park, Illinois, was roundly applauded for his chairmanship of the Banquet Committee.



Dr. Raymond W. McNealy, F.A.C.S., F.I.C.S., D.A.B., Chairman of Assembly, opening the Convocation

Twenty-Second Annual Convocation Canadian and United States Sections

The Twenty-Second Annual Convocation of the Canadian and United States Sections (North American Federation) of the International College of Surgeons took place on Tuesday evening, September 12, 1957, at the Chicago Civic Opera House.

The first to be named on the Convocation Program was **Raymond W. McNealy,** M.D., F.A.C.S., F.I.C.S. (Hon.), Chairman of Assembly.

The Co-Chairmen were then listed: **Peter A. Rosi,** M.D., F.A.C.S., F.I.C.S.; **Lyon H. Appleby,** M.D., F.R.C.S., F.A.C.S., F.I.C.S. (Hon.); **Karl A. Meyer,** M.D., F.A.C.S. (Hon.), F.I.C.S. (Hon.); **Austin Smith,** M.D., F.I.C.S. (Hon.); **Morris Fishbein,** M.D., F.I.C.S. (Hon.); **R. M. H. Power,** M.D., F.A.C.S., F.I.C.S.; **Max Thorek,** M.D., F.B.C.S. (Hon.), F.P.C.S. (Hon.), F.I.C.S. (Hon.); **Ross T. McIntire,** M.D., F.A.C.S. (Hon.), F.I.C.S. (Hon.).

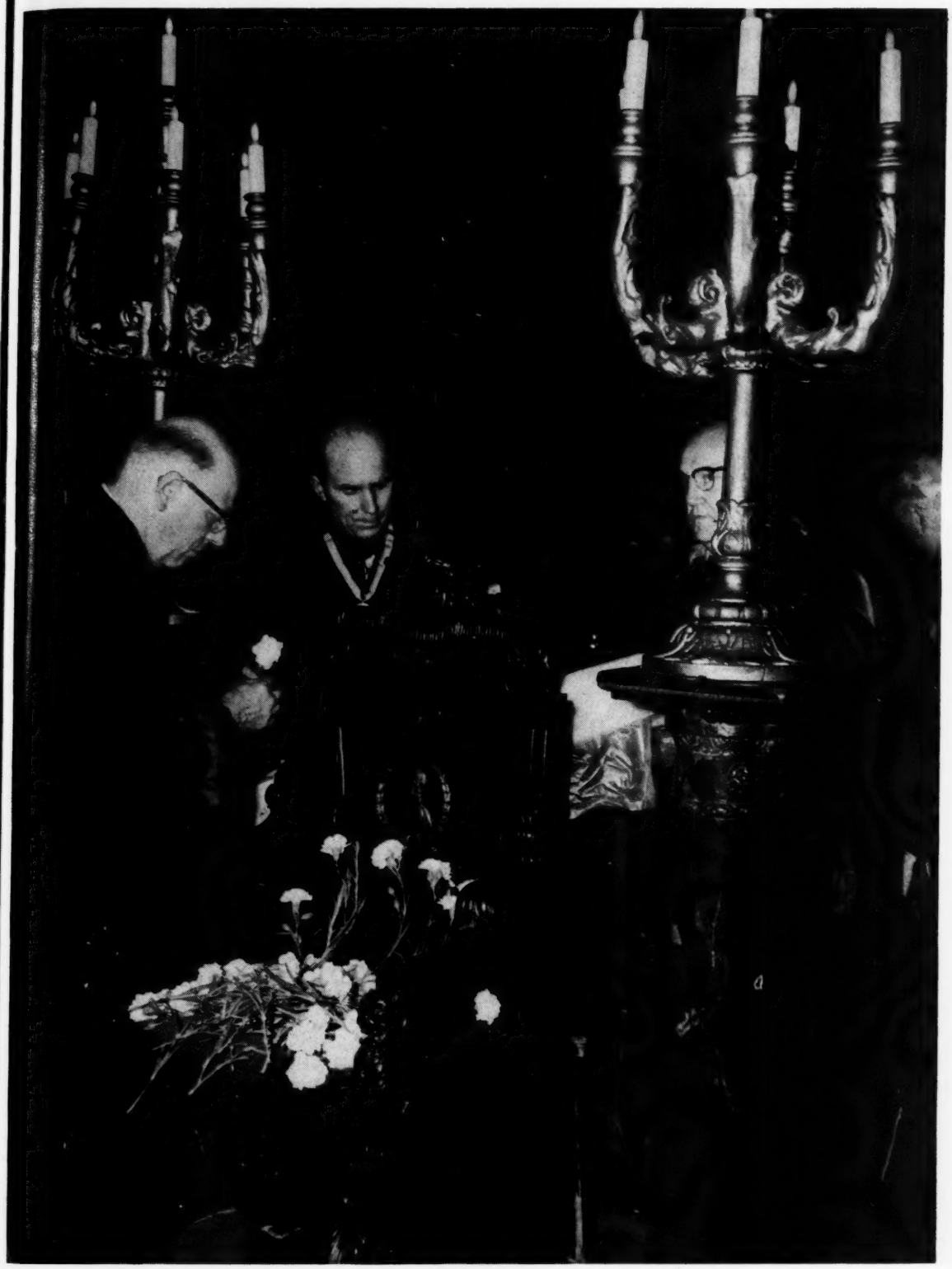
Horace E. Turner, M.D., F.A.C.S., F.I.C.S., was chairman of Convocation; **Ernest F. Purcell,** M.D., F.I.C.S., director of pageantry; **Claire E. Carr,** M.D., F.I.C.S., music director and monitor; **Francis D. Wolfe,** M.D., F.A.C.S., F.I.C.S., was marshal; and **Walter C. Burket,** M.D., F.I.C.S., associate marshal.

Dr. McNealy opened the Convocation and introduced **Curtice Rosser,** M.D., F.A.C.S., F.I.C.S., president of the United States Section and of the North American Federation, International College of Surgeons.

The Invocation was pronounced by the **Rev. Granger E. Westberg,** D.D., Associate Professor, Religion and Health, University of Chicago Medical School and Federated Theological Faculty.

Dr. Rosser then introduced **Henry W. Meyerding,** M.D., F.A.C.S., F.I.C.S. (Hon.), President-Elect of the International College of Surgeons.

After the procession of flags and the presentation of colors, Dr. Ernest F. Purcell led the memorial service for deceased members.



Dr. Ernest F. Purcell, Dr. E. N. C. McAmmond, and Dr. Francis D. Wolfe participating in Memorial Service for deceased members.

Deceased Members

CANADIAN SECTION

Dr. Eric Wellesley Boak,
Victoria, British Columbia

Dr. Jacob Goldstein,
Toronto, Ontario

Dr. Arthur Louis Lynch,
Vancouver, British Columbia

Dr. William T. MacKinnon,
Amherst, Nova Scotia

Dr. Samuel E. Moore,
Regina, Saskatchewan

UNITED STATES SECTION

Dr. William Milton Adams,
Memphis, Tennessee

Dr. John Leo Aday,
Little Rock, Arkansas

Dr. Ralph F. Allen,
Coral Gables, Florida

Dr. William T. H. Baker,
Pueblo, Colorado

Dr. Harold C. Benjamin,
Jersey City, New Jersey

Dr. Joseph Alonzo Berry,
Tuskegee, Alabama

Dr. Charles J. Brady,
Lake Geneva, Wisconsin

Dr. James Manning Brockman,
Memphis, Tennessee

Dr. James R. Brown,
Huntington, West Virginia

Dr. Fern W. Buooa,
Lorimor, Iowa

Dr. H. B. Buterbaugh,
Indiana, Pennsylvania

Dr. Anton J. Carlson,
Chicago, Illinois

Dr. Frank J. Cerniglia,
West Forest Hills, New York

Dr. John Orville Crist,
Chester, Pennsylvania

Dr. Austin Byron De Freece,
Bellevue, Washington

Dr. William Clarence Doepp,
Blue Island, Illinois

Dr. Benjamin M. Duggar,
Pearl River, New York

Dr. Robert William Elworthy,
Elmhurst, Illinois

Dr. John Butler Faison,
Jersey City, New Jersey

Dr. Francis Peter Ferraro,
Pittsburgh, Pennsylvania

Dr. George Henry Gage,
Rochester, New York

Dr. Simon David Gideon,
Chicago, Illinois

Dr. Amos Graves,
San Antonio, Texas

Dr. Robert Lucian Hamilton,
Marysville, California

Dr. Charles D. Heisel,
Cincinnati, Ohio

Dr. Valentine Martin Hess,
Washington, District of Columbia

Dr. Charles E. Holzer,
Gallipolis, Ohio

Dr. Robert Fee Hyatt, Jr.,
Monticello, Arkansas

Dr. Ernest Edward Johnson,
Passaic, New Jersey

Dr. Homer David Junkin,
Paris, Illinois

Deceased Members

Dr. Byrl Raymond Kirklin,
Rochester, Minnesota

Dr. Herbert August Laage,
New York, New York

Dr. Harold I. Lillie,
Rochester, Minnesota

Dr. Oliver Schaefer Lloyd,
Baltimore, Maryland

Dr. Ira H. Lockwood,
Kansas City, Missouri

Dr. Clayton L. McCoy,
Hastings, Pennsylvania

Dr. Wilbur Eugene Meneray,
Gadsen, Alabama

Dr. Felix Perryman Miller,
El Paso, Texas

Dr. Franceso Mogavero,
Philadelphia, Pennsylvania

Dr. Louis Edwin Moon,
Omaha, Nebraska

Dr. Frederick George Novy,
Ann Arbor, Michigan

Dr. Russell W. Owens,
Salt Lake City, Utah

Dr. John Eugene Parsons,
Little Rock, Arkansas

Dr. Harry MacDonald Peggs,
St. Albans, Vermont

Dr. Robert Pollock,
New York, New York

Dr. David Promin,
Philadelphia, Pennsylvania

Dr. Alice Louisa Randall,
Charleston, West Virginia

Dr. Paul A. Remington,
Spokane, Washington

Dr. Henry Isaac Scheer,
New York, New York

Dr. Bernard Louis Sinner,
St. Louis, Missouri

Dr. Lucille H. Snow,
Evanston, Illinois

Dr. Buell H. Sprague,
Hollywood, California

INTERNATIONAL

Prof. Dr. Ramon Carrillo,
Buenos Aires, Argentina

Dr. Domingos Guilherme da Costa,
Rio de Janerio, Brazil

Dr. Marcial Fallas Diaz,
San Jose, Costa Rica

Dr. Fernando Pinto Echeverria,
San Jose, Costa Rica

Dr. Jose Angel Coto Garbanzo,
San Jose, Costa Rica

Dr. A. Rodriguez Dias,
Habana, Cuba

Prof. Dr. Georg Ernst Konjetzny,
Hamburg, Germany

Dr. Guiseppe Baroni,
Treviso, Italy

Prof. Pietro Bezza,
Sesena, Italy

Prof. Dr. Gian Maria Giuliani,
Genoa, Italy

Prof. Brancati Raffaele,
Catania, Italy

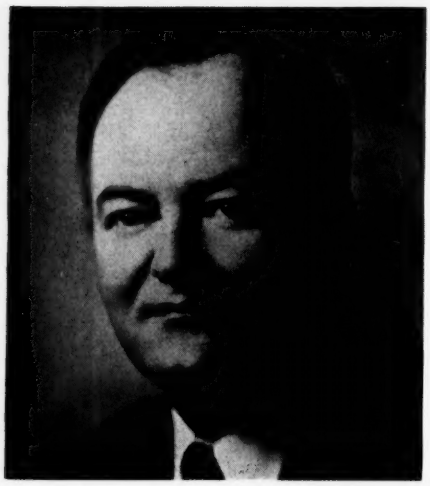
Dr. Calzolari Torquato,
Cremona, Italy

Prof. Dr. Soichi Yanagi,
Kanagawa Prefecture, Japan

Dr. Feridun Sevket Evrensel,
Istanbul, Turkey

Prof. Dr. Ernest Von Novak,
Rawalpindi, West Pakistan

Senator Humphrey Convocation Speaker



Senator Hubert H. Humphrey

Dr. Curtice Rosser introduced the Convocation Speaker, the Honorable Hubert H. Humphrey, United States Senator from Minnesota.

"It is indeed an honor," began Senator Humphrey, "to be speaking before this great assembly of surgeons, men whose whole careers have been devoted to the service of humanity. It is all the more fitting that you have asked me to discuss international affairs because the goal of our foreign policy must quickly become what the objective of this great profession has always been—the service of humanity."

Then he went on to say, "Living here in the United States—in this prosperous country of ours and in light of our technical accomplishments—it is difficult for us to believe that more than two-thirds of the world is sick. There are those who would say the figure is closer to four persons out of five.

"Millions of suffering people are bound by the oppressive chains of disease. In large sections of the world, malnutrition, illiteracy and inadequate shelter are still part of the everyday life of many millions of our fellow men.

"Now one thing is clear. A vigorous, peaceful, happy, productive world can arise from abundant health and vitality of men and women—it can never grow under the existing burden of sickness, malnutrition and poverty. No amount of diplomacy or armament can bring peace where the bodies and minds of men are sick.

"I have seen how communism thrives on misery. Recently the Soviets have moved into the Middle East and the Far East. There on my recent fact-finding mission for the Foreign Relations Committee, I saw poverty and misery provide the fertile ground for the very dissatisfactions that so often make communism acceptable.

"Faced as we are with a new Soviet approach in those areas where the greatest doubt and misunderstandings as to our way of life exist, we are now, more than ever, challenged to help the starving and disease-ridden people of the world to raise themselves up out of their misery.

"Had Karl Marx never lived, and Lenin and Stalin never come to power in the Soviet Union—had communism never been heard of—there would still be great social challenges that we cannot afford to ignore. We ought not to need, as our motivation for doing what we ought to do anyway, the wicked and evil philosophy of communism. Sick people ought to be healed even if a communist never lived. Illiterate people ought to be educated without ever having to receive the inspiration for this noble work out of fear of communist infiltration.

"What we Americans need do is to be ourselves—just do what comes naturally—to be generous, humanitarian, and compassionate, the hallmark of our tradition and our heritage."

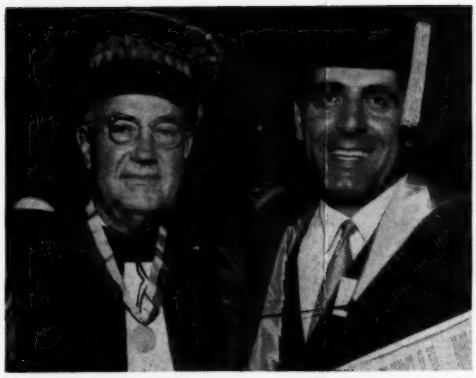
"The promotion of international health," observed Senator Humphrey, "is one of the best means of promoting international co-operation and understanding. Whatever we can do to promote health will also promote peace and will reap for us tremendous dividends in friendship."

The Senator then discussed our participation in the World Health Organization and the great network of voluntary organizations which are co-operating on an international basis to solve the world's complex health problems. He spoke of the United Nations Children's Fund and the universal appeal it makes to the hearts of men. The United States government agencies, such as the Fulbright Fellowship Award Committee, the U. S. Public Health Service, the National Institutes of Health, and the Voice of America, work in close formal or informal collaboration not only among themselves but also with foreign agencies. Non-Governmental groups, such as the Rockefeller Foundation, frequently not only lend their support but actually point the way. The Senator particularly cited among the American Voluntary agencies those supported by the three great faiths.

"My friends," he said, "in breaking the vicious circle of poor health, low productivity, and low living standards leading again to poor health, these voluntary groups, the world organizations, our government, and some private interests, are helping to eradicate the social and economic causes of war. The goals are not beyond reach."

Senator Humphrey suggested the establishment of an International Professional Medical Group or Foundation whose aim would be to lift the burden of disease from the shoulders of mankind through research, study, assistance and information exchange.

Senator Humphrey paid tribute to those who seek international understanding



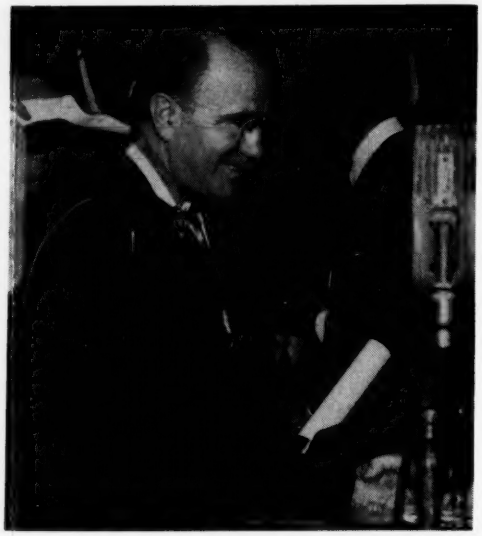
Dr. Percival Bailey, Ph.D., Sc.D., Distinguished Professor of Neurology and Neurological Surgery at the University of Illinois, with Dr. Raul F. Matera, neurosurgeon of Buenos Aires, Argentina.

John Charnley, M.B., F.R.C.S. (Eng.), Orthopedic Surgeon, Royal Manchester Infirmary, being invested with the hood of Honorary Fellowship.

Frederick Baron von Lupin, Consul General of Germany, representing Dr. Nicolai Guleke.

CHICAGO

TWENTY-SECOND ANNUAL BANQUET
OF THE
International College Of Surgeons
Palmer House — Chicago — September 11, 1957



Dr. Virgil S. Counseller, Professor of Surgery at the University of Minnesota Graduate School, Mayo Foundation, in Rochester, smilingly accepts congratulations.

through voluntary and professional co-operation in what he called "People to People Exchange."

"Closely related to problems of health and hunger," continued the Senator, "is the basic issue of economic development for the underdeveloped countries — the major issues of capital investment and technical assistance.

"People can only start thinking of freedom and the rights of the individual when they are freed from the day-to-day concern of trying to eke out a bare survival and are in good enough health to turn their attention to matters other than sheer subsistence. In helping others to help themselves, we are achieving in a practical way a means for these people to live fuller lives.

"But the requirements of a just and enduring peace are exacting and difficult. Clearly we cannot expect to live peacefully in a world slum overflowing with disease, tension and hate. Nor can we impose peace by bombs and tanks.

"We must join in this all-out attack on poverty, disease, hunger and illiteracy. We must share our technical assistance—the scientific know-how—in food production, industrial development, health services, and education. Such a program will increase the wealth and welfare of the underdeveloped countries and bring greater opportunities to their people.

"Moreover, such a program is true Americanism. I am confident that this is what you had in mind when you asked me to speak to you on the topic *Our International Policy—for Humanity.*"

Senator Humphrey quoted Woodrow Wilson:

"The idea of America is to serve humanity. Every time you loose the Stars and Stripes to the wind, it is in itself a message that you are . . . . not on an errand of conquest, but an errand of service.

"You are serving a government, Gentlemen, you are serving a people. There have been other nations as rich as we. There have been other nations as powerful. There have been other nations as spirited. But I hope we shall never forget that we created this nation, not to serve ourselves, but to serve mankind. No other nation

Dr. Wilrod Bonin, Dean and Head of the Department of Histology and Embryology, University of Montreal, Canada, receiving diploma while Dr. Ross T. McIntire adjusts the hood of honor.

was ever born into the world with the purpose of serving the rest of the world just as much as it served itself."

"I myself," concluded Senator Humphrey, "can have no better theme than this tonight. In essence this goal is the goal of the surgeon written large on a world-wide scale. In pursuing that goal the statesmen of America, in all walks of life, will have to achieve the same heights of daring which have long characterized the surgeon in saving life and health."

Dr. Ross T. McIntire, Executive Director of the International College of Surgeons, spoke on "Retrospect and Prospect."

The ceremony of conferring honorary degrees and the induction of members began with the administering of the Pledge of the International College of Surgeons to the inductees by Dr. Curtice Rosser.

The honorary degrees were conferred by **Dr. Henry W. Meyerding,** F.A.C.S., F.I.C.S. (Hon.), President-Elect of the International College of Surgeons; **Dr. Max Thorek,** Founder and Secretary General; and **Dr. Ross T. McIntire,** the Executive Director.

Candidates from abroad were introduced by Dr. Meyerding and Dr. Thorek.

Dr. William Mengert, Professor and Head of the Department of Obstetrics and Gynecology, University of Illinois, graciously accepting congratulations from Dr. Meyerding.

Dr. Henri-Marie Laborit, F.I.C.S., resplendent in his evening full dress military uniform with deep red velvet cuffs to indicate his medical status, being given his diploma as Honorary Fellow.

Canadian candidates were introduced by **Dr. Richard Power,** President of the Canadian Section, and by **Dr. E. N. C. McAmmond,** Secretary.

Dr. Rosser and Dr. McIntire presented the candidates from the United States Section.

The benediction was pronounced by **G. George Fox,** M.A., Ph.D., Rabbi Emeritus, South Shore Temple, Chicago.

Music was provided at the Convocation as well as at the social hour preceding the banquet through the courtesy of **Mr. James C. Petrillo** and the Chicago Federation of Musicians.

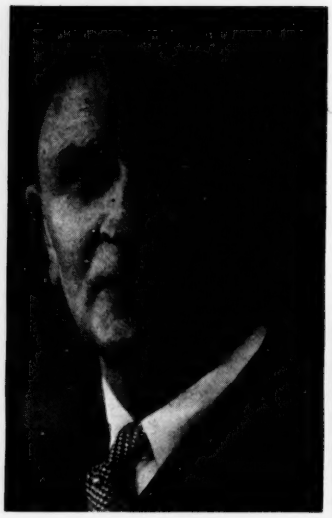
The Recessional took place to the stirring tempo of Sousa's "Stars and Stripes Forever," and "Semper Fidelis," thus marking the formal close of the Twenty-Second Annual Convocation and the Twenty-Second Annual Congress of the Canadian and United States Sections, North American Federation, International College of Surgeons.

Honorary Fellows

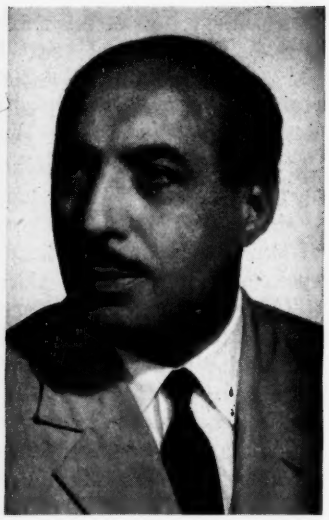
INTERNATIONAL COLLEGE OF SURGEONS

1957

Percival Bailey, M.D., Ph.D., Sc.D.



M. A. Van Bouwdijk Bastiaanse, M.D.



Mario Battezzati, M.D., F.I.C.S.

Percival Bailey, M.D., Ph.D., Sc.D., Distinguished Professor of Neurology and Neurological Surgery, University of Illinois. Director, Illinois State Psychopathic Institute. Recipient of the Alumni Medal, University of Chicago; the Abraham Jacobi Prize, American Neurological Association; the Otfrid Foerster Medal, German Neurosurgical Society. Officier de la Legion d'Honneur de France (1956). Awarded Honorary degrees by the University of Paris, University of Chicago and Southern Illinois University. Honorary member of numerous scientific societies. Author of many books and articles.

Presented by **George F. Lull**, M.D., F.A.C.S., F.I.C.S. (Hon.), Chicago, Illinois.

M. A. Van Bouwdijk Bastiaanse, M.D., Professor and Head of the Department of Obstetrics and Gynecology, University of Amsterdam, The Netherlands. Doctor of Laws HONORIS CAUSA, University of Leeds, England. Knight, Order of the Dutch Lion (1957). Honorary member of many scientific societies. Noted for research and numerous contributions to the literature in the field of obstetrics and gynecology — particularly malignancies, describing new operations, caesarean sections and anesthesia.

Presented by **Mr. Philip J. C. Tissen**, Chancellor, Consulate General of The Netherlands.

Mario Battezzati, M.D., F.I.C.S., Director and Surgeon-in-Chief, Institute of Surgical Pathology, University of Parma, Italy. Research with Prof. R. Leriche of Paris, and Profs. H. Olivecrona and C. Crafoord of Stockholm. Formerly, Surgical Clinics of the Medical School of the University of Genoa and the Medical School of the University of Torino. Author of more than 120 articles treating primarily with the physiology and surgery of vascular and cardiac diseases.

Presented by **Dr. Augusto Borselli**, Public Relations Officer, Italian Consulate.

I. Boerema, M.D., Professor of Surgery, University of Amsterdam, The Netherlands. Originator of many surgical technics. One of the two original pioneers of hypothermia. Introduced a new basic principle in surgery by operating in a tank under 3 atmospheres of pressure. Author of numerous scientific contributions to the surgical literature. Member of many surgical societies in the Netherlands and throughout the world.

Presented by **Mr. Philip J. C. Tissen**, Chancellor, Consulate General of The Netherlands.

Wilbrod Bonin, M.D., Dean and Head of the Department of Histology and Embryology, Faculty of Medicine, University of Montreal, Canada. Member and Past President of the French Canadian Society for the Advancement of Science; Member, Board of Governors of the College of Physicians and Surgeons of the Province of Quebec; Member, Committee on Credentials and Committee on Accreditation of Hospitals of College of Physicians and Surgeons, Quebec. Author of numerous contributions to histological and embryological literature.

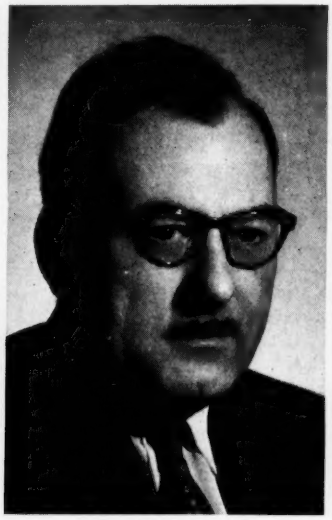
Presented by **Jean Paul Legault**, M.D., F.A.C.S., F.I.C.S., Montreal, Canada.

New York. Member Examining Board: American Board of Neurological Surgery; Former Chairman, Committee on Neurosurgery, Royal College of Physicians and Surgeons of Canada. Member of many scientific societies and author of numerous contributions to the literature in the field of neurology.

Presented by **Richard M. H. Power**, M.D., F.A.C.S., F.I.C.S., Montreal, Canada.

Virgil S. Counseller, M.D., F.A.C.S., Professor of Surgery, University of Minnesota Graduate School, Mayo Foundation, Rochester, Minnesota. Head of a Section in General Surgery, The Mayo Clinic. Certificate of Honor (1926 and 1927), American Medical Association. Served

I. Boerema, M.D.



Wilbrod Bonin, M.D.

John Charnley, M.B., F.R.C.S.

John Charnley, M.B., F.R.C.S., Orthopedic surgeon, Royal Manchester Infirmary. Fellow, Royal College of Surgeons, England. Lecturer: Orthopedics, University of Manchester; Hunterian Professor (1946). Author of the "Reduction and Fixation of Femoral Shaft." Author of the "Closed Treatment of Common Fractures" and "The Compression Arthrodesis."

Presented by **Edward L. Compere**, M.D., F.A.C.S., F.I.C.S. (Hon.), Chicago, Illinois.

William V. Cone, M.D., F.R.C.S. (C), F.R.S. (C), D.C.L. (Hon.), Professor of Neurosurgery, McGill University, Montreal, Canada. Consultant Neurosurgeon: Montreal General Hospital, Montreal Children's Hospital, Champlain Valley and Physicians Hospitals, Plattsburgh, New York, and Lake Placid Hospital, Lake Placid,

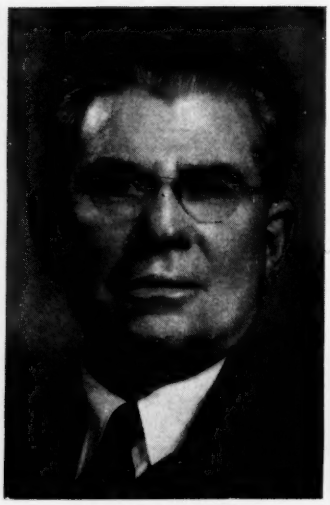
with R.O.T.C., World War I; Lt. Comdr. U. S. Naval Reserve. Member of numerous scientific societies. Author of about 150 contributions to the medical literature.

Presented by **Henry W. Meyerding**, M.D., F.A.C.S., F.I.C.S. (Hon.), Rochester, Minnesota.

Claude F. Dixon, M.D., M.S., F.A.C.S., Professor of Surgery, University of Minnesota Graduate School, Mayo Foundation, Rochester, Minnesota. Head of a Section of Surgery, Mayo Clinic; First Assistant to Dr. Charles H. Mayo (1926-1928). Honorary member, Royal College of Medicine, England. Received citation from University of Kansas for distinguished service in surgery. Honorary member and member of many scientific societies.

Presented by **Francis L. Lederer**, M.D., F.A.C.S., F.I.C.S. (Hon.), Chicago, Illinois.

William V. Cone, M.D., F.R.S. (C), F.R.C.S. (C), D.C.L. (Hon.)



Virgil S. Counseller, M.D., F.A.C.S.

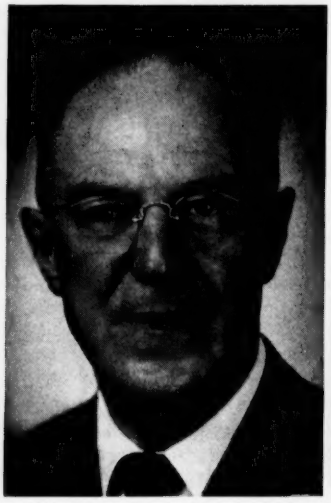
Claude F. Dixon, M.D., M.S., F.A.C.S.

Nicholson J. Eastman, M.D., Professor of Obstetrics, Johns Hopkins University; Obstetrician-in-Chief, Johns Hopkins Hospital, Baltimore, Maryland. Professor of Obstetrics and Gynecology, Peiping Union Medical College, Peiping, China (1933-1935). Visiting Professor of Obstetrics, University of Hong Kong (1935-1956). Past President, American Association of Obstetricians and Gynecologists (1953), and American Academy of Cerebral Palsy (1957). Author of many publications dealing with fetal blood study. Editor-in-Chief for Obstetrics, Obstetrical and Gynecological Survey.

Presented by **Frederick H. Falls,** M.D., F.A.C.S., F.I.C.S. (Hon.), Chicago, Illinois.

Frederick A. Figi, M.D., F.A.C.S., Professor of Surgery, Mayo Foundation and University of Minnesota Graduate School of Medicine, Rochester, Minnesota. Senior Consultant, Section of Plastic Surgery and Laryngology, Mayo Clinic. Chairman, American Board of Plastic

Nicholson J. Eastman, M.D.



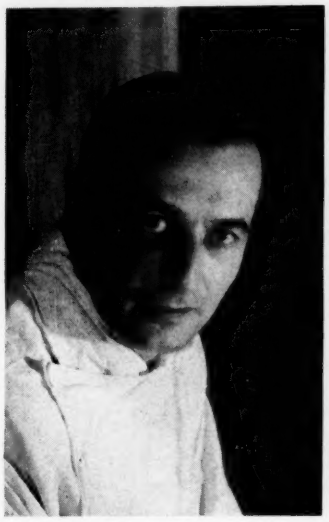
Frederick A. Figi, M.D., F.A.C.S.

Claude J. Hunt, M.D., F.A.C.S., F.I.C.S.

Surgery. Past President, American Association of Plastic Surgeons and American Society of Plastic and Reconstructive Surgery. Member of Charter Group Certified by the American Board of Plastic Surgery. Officer of the "Orden Nacional De Merito Carlos J. Finlay." Honorary member and member of many scientific societies. Contributor of numerous articles to the medical literature.

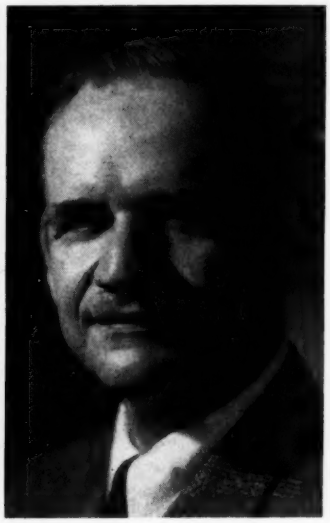
Presented by **Neal Owens**, M.D., F.A.C.S., F.I.C.S., New Orleans, Lousiana.

chenne of Boulogne (1952); International Prize of the Medical Press, Turin (1954); Chevalier de la Legion d'Honneur. Honorary Member and Member of many scientific societies. Author of numerous articles on artificial hibernation and of 177 contributions to the literature of surgery and anesthesia. Under the leadership of Dr. Laborit research on artificial hibernation also has been started in Germany, Austria, Switzerland, Belgium and Holland.



Henri-Marie Laborit, M.D., F.I.C.S.

Said Malek, M.D.



William Mengert, M.D., F.A.C.S.

Claude J. Hunt, M.D., F.A.C.S., F.I.C.S., Chief, Surgical Service Kansas City General Hospital and Research Hospital, Kansas City, Missouri. President, Missouri State Surgical Society. Past President, American Goiter Association; Jackson County Medical Society and the Kansas City Surgical Society. Past Chairman, Surgical Section Southern Medical Association. Honorary Member and Member of numerous scientific societies. Member, Editorial Board American Journal of Surgery. Author of over 100 articles on subjects pertaining to surgery.

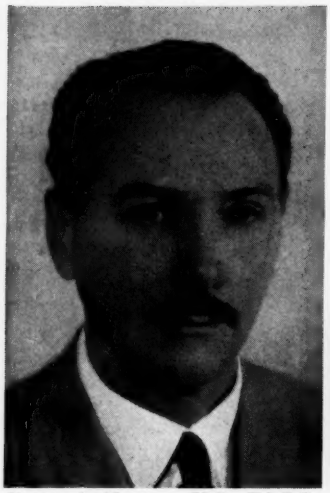
Presented by **Arnold S. Jackson**, M.D., F.A.C.S., F.I.C.S., Madison, Wisconsin.

Henri-Marie Laborit, M.D., F.I.C.S., Director of Clinical and Scientific Research on Artificial Hibernation, Army Research Medical Center, Military Hospital of Val de Grace, Paris. Recipient of the Prize in Naval Medicine (1946); Laureate of the Academy of Medicine, Prix Laborie (1951); Prize of the Academy Du-

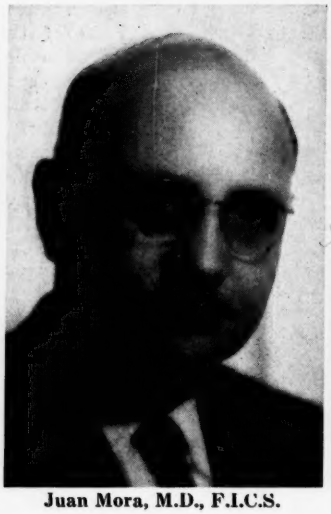
Presented by **Mlle. Jacqueline Bertrand**, Consul of France.

Said Malek, M.D., Professor of Urology, University of Teheran; Vice President of the Senate, Teheran, Iran. Former Minister of Public Health. Vice President of the Iranian Red Lion and Sun Society (Red Cross). Member of the Supreme Assembly of Education by order of His Majesty, the King of Iran (1935); Former Surgeon General of the Iranian Army; and Vice-President of the Public Health Assembly. Awarded the Insignia of Brig. General; the Insignia of the Iranian Lion and Sun; the Insignia of Iranian Science, and the Insignia of Homayoun by the King of Iran; the Insignia of the Nile from the Egyptian Government. Given the title of Loghmanolmolk by the last king of the Kajar Dynasty.

Presented by **John B. O'Donoghue**, M.D., F.A.C.S., F.I.C.S., Chicago, Illinois.



Fernando Montero, M.D., F.I.C.S.



Juan Mora, M.D., F.I.C.S.

Juan Netto, M.D., F.I.C.S.

William Mengert, M.D., F.A.C.S., Professor and Head of the Department of Obstetrics and Gynecology, University of Illinois. Former Chairman, Department of Obstetrics and Gynecology, Parkland Memorial Hospital, Texas; Professor and Chairman of the Department of Obstetrics and Gynecology, Southwestern Medical School of the University of Texas. Past President, American College of Obstetrics and Gynecology; Central Association of Obstetricians and Gynecologists. Associate Editor, Obstetrics and Gynecology and American Journal of Obstetrics and Gynecology. Honorary member and member of numerous scientific societies. Over ninety contributions to medical literature.

Presented by **Gilbert Douglas,** M.D., F.A.C.S., F.I.C.S., Birmingham, Alabama.

Fernando Montero, M.D., F.I.C.S., Professor of Surgery, Faculty of Medicine, Asunción, Paraguay. Head of the Surgical Service, Surgical Clinic of the Faculty of Medicine; Head of the Surgical Service, Institute of Social Security. Member, Examining Board, National Faculty of Medicine. Member of many surgical societies. Author of numerous scientific articles.

Presented by **Mr. Fritz A. Adler,** Consul General of Paraguay.

Juan Mora, M.D., F.I.C.S., Former Professor of Clinical Surgery, and Head of the Surgical Clinic, Faculty of Medicine, National University of Mexico. Regional Secretary, International College of Surgeons. Former Director and Surgeon, Hospital of the Department of Labor and Social Security. Past Secretary-General of the Mexican Academy of Surgery. Member of many scientific societies and contributor to the surgical literature.

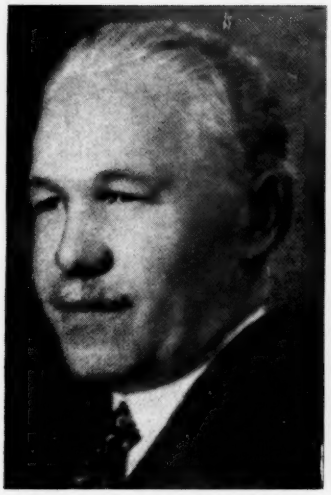
Presented by **Manuel A. Manzanilla,** M.D., F.I.C.S. (Hon.), Mexico, D. F., Mexico.

Juan Netto, M.D., F.I.C.S., Professor of Clinical Surgery, Faculty of Medicine, Asunción, Paraguay. President, Paraguayan Section, International College of Surgeons. Formerly, Consulting Surgeon, Department of Thoracic Surgery, Faculty of Medical Sciences, Buenos Aires, Argentina; President, Paraguayan Society of Phthisiology; Chief of Surgical Service, Sanatorio Bella Vista; President, Paraguayan-American Cultural Center. Honorary Member and Member of many surgical societies. Recipient of the "Cruz del Chaco" and the "Cruz del Defensor." Author of five books and many scientific publications.

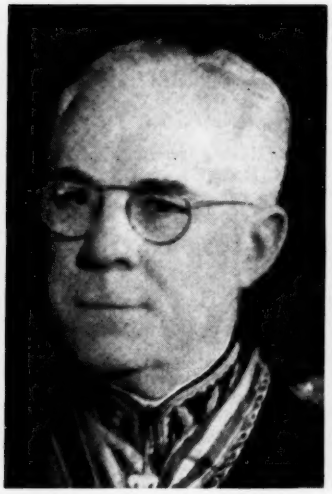
Presented by **Mr. Fritz A. Adler,** Consul General of Paraguay.

Cesar A. Pantoja, M.D., F.I.C.S., Professor of Clinical Surgery, Faculty of Medicine, National University of Colombia. Member, Board of Directors, Hospital San Juan de Dios, Bogotá. Former Director, National Radium Institute of Bogotá. Former Director, Cancerology and Member of the Academic Council of the National University of Colombia. Founder of the Colombian Section and Member of the International Board of Governors, I.C.S.

Presented by **Dr. Francisco Javier Henao,** Vice Consul of Colombia.



Cesar A. Pantoja, M.D., F.I.C.S.



Emmanuel Marques Porto, M.D., F.I.C.S.

Nobuyoshi Takahashi, M.D., F.I.C.S.

Emmanuel Marques Porto, M.D., F.I.C.S., Marshal and Surgeon General, Brazilian Army. Former Chief of the Health Service of the Brazilian Expeditionary Force in the Italian Campaign and a consultant in the Mediterranean Theatre of War Operations. He served as Professor of War Surgery at the Escola de Saude do Exercita. Marshal Porto is a Founding Fellow of the Brazilian Academy of Military Medicine and has been honored by many medals and decorations, including the Brazilian War Medal, the Order of Military Merit, and the Legion of Merit of the United States of America. Author of more than 100 scientific articles and two books on military medicine.

Presented by **Mr. Eurico N. Nogueira Ribeiro**, Consul of Brazil.

Nobuyoshi Takahashi, M.D., F.I.C.S., Emeritus Professor of Surgery, University of Chiba; President, Japanese Red Cross Hospital of Narita; Vice President, Japan Clinical Surgeon's Association; Past President, Japanese College of Surgeons; Past Trustee, Science Council of Japan; Former Dean, University of Chiba; Past President, Chiba Medical Society, Past President, Chiba Medical Association. Author of numerous books and papers.

Presented by **Mr. Kihachiro Ohmori**, Acting Consul General of Japan.

Dr. Frederick A. Figi, Professor of Surgery at the Mayo Foundation and University of Minnesota Graduate School of Medicine, congratulated by Dr. Henry W. Meyerding, also of Rochester.

Prof. Dr. M. A. van Bouwdijk Bastiaanse and Prof. Dr. I. Boerema, bo h of the University of Amsterdam, receiving their diplomas from Dr. Henry W. Meyerding.

Nicolai Guleke—Master Surgeon

INTERNATIONAL COLLEGE OF SURGEONS

1957

Nicolai Guleke, M.D., F.I.C.S. (Hon.)

Nicolai Guleke, M.D., F.I.C.S. (Hon.), Professor Emeritus University of Jena, Germany. Former Professor, Surgical University Clinic, Marburg. Formerly associated with Prof. Dr. von Bergmann, a pathfinder of modern surgery, and Prof. Madelung, Surgical University Clinic at Strasbourg. Prof. Guleke developed operations on rectal carcinoma; pseudoarthroses and stenoses caused by intra-thoracic tumors. The modern development of brain surgery in Germany is largely connected with his name. Author of more than 90 scientific papers published in medical journals and a number including: "Operations on the Pancreas," "Surgery of the Stomach and Duodenum," "Inflammations of the Brain Membranes," "Surgery of Brain Tumors," and "Surgery of the Skull and Brain" (Surgery of Kirschner). Prof. Guleke's outstanding work on "The Surgery of Diseases of the Colon," which appeared this year, is the crowning culmination of a brilliant surgical career.

Presented by **Frederick Baron von Lupin,** Consul General of Germany.

Prof. Dr. med. Guleke

Wiesbaden, August 6, 1957

Mr. President, Ladies and Gentlemen:

I consider it a great distinction and a high honor to be chosen as a Master Surgeon of the International College of Surgeons, an organization whose aims I have shared wholeheartedly since the high-minded thinking, the vigorous initiative and the unremitting efforts of our beloved Dr. Max Thorek first brought it into existence. The most prominent surgeons of the world unite in our brilliant Congresses, which weld us together not only in common endeavor and the dissemination of scientific knowledge but in personal allegiance and friendship. This brings a strong element of harmony into our turbulent world; it is more effective in the fostering of international understanding and good will than any political effort can ever be.

I therefore extend my humble and hearty thanks for the great honor that has been conferred upon me today. May the International College of Surgeons continue to grow and prosper in the phenomenal manner that has always marked its progress, and may its destiny be directed for a long time to come by its dedicated Founder and my dear and honored friend, Professor Max Thorek.

—Guleke

LETTER OF ACCEPTANCE FROM DR. GULEKE

The above gracious letter of acceptance, written by Dr. Guleke, was read by Frederick Baron von Lupin, Consul General of Germany, who represented Dr. Guleke at the Convocation ceremony.

Modest, courteous and benignant, the letter is a key to the character of this great surgeon and noble person.

Laura Jackson—Honorary Member

Laura Jackson, B.S.

Laura Jackson, B.S., Associate Professor in Hospital Administration. Associate Director, Program in Hospital Administration. Founder and Editor, "Hospital Administration Review." Northwestern University. Co-ordinator of Public Relations and Congress Manager, International College of Surgeons. Secretary Treasurer, Association of University Programs in Hospital Administration. Founder, Chicago Conference on Association Publicity. Program Coordinator and Public Relations Director, Tri-State Hospital Assembly 1938-1956; Citation and award for service, 1957. Former Director of Public Relations and Congress Program Coordinator, American College of Surgeons; Feature writer, Chicago Daily Journal and Chicago Evening Post. Recipient of George C. Bastian Honor Award in Journalism. Honorary Member American Cancer Society.

Presented by **Charles U. Letourneau,** M.D., Chicago, Illinois.

GROUP PROTECTION AGAINST SUIT FOR MALPRACTICE

Major Insurance Coverage for Members of the United States Section International College of Surgeons

An important feature has been added to the Group Malpractice Insurance Plan of the International College of Surgeons. Partners who are not members of the College can now be covered with the entire Partnership afforded the low Group Rate. This will now effect savings up to 50 per cent to Partnerships as well as individual participants.

If you have not already entered the Group, you can receive full information from **John L. Krause & Associates, 29 S. LaSalle Street, Chicago 3, Ill., Administrators for the Group Plan.**

From the Executive Director's Notebook

This report is being written following the Congress which has just been completed in Chicago, but there are a number of things I believe the members of the College should know concerning my visit to certain of the western states.

It was my privilege to be a guest of the Reno Surgical Society on August 23 and to spend considerable time with Doctor Frederick M. Anderson, the Regent of the State of Nevada. Doctor Anderson is a very prominent citizen of his state and is a member of the Board of Trustees of the University of Nevada. He takes an active part in all professional activities, and I found the Fellows of the International College of Surgeons, under his guidance, bringing much credit to the College.

Following this meeting it was my pleasure to be the guest of Doctor Charles Mathe at a dinner meeting held at the Bohemian Club in San Francisco. This was on the evening of August 24, and all of the officers and members of the Credentials Committee of the Northern California Surgical Section were present. Doctor Mathe served a gourmet dinner. It has been my privilege, through the years, to attend many dinners in many parts of the world. Doctor Mathe's was one of the finest in my experience. As in Doctor Anderson's case, Doctor Mathe, a native son of California, is one of San Francisco's outstanding citizens.

The business meeting itself was of real interest, and constructive plans for the coming year were made. The Northern California Section is co-operating in a splendid manner to make the March meeting in Los Angeles a great success.

Upon leaving San Francisco, I journeyed to Portland, Oregon, where I met with Doctor Ben Wade, the Regent for that state. We had a luncheon meeting, at which a large number of surgeons who are not members of the International College of Surgeons were present. This was a very pleasant and, I believe, constructive occasion, for subsequently a number of applications for membership were received from surgeons who were guests at this luncheon. It was possible for me, in an informal manner, to tell these men of the aims of the College and something of the program for the immediate future.

Dr. Ross T. McIntire
F.A.C.S., F.I.C.S.

While in Portland, I was the guest speaker at the banquet given by The Indoor Sports' Club, Inc. This organization is made up of physically handicapped people from all over the United States. It was an inspiring thing to see more than 250 physically handicapped people who required wheel chairs seated at this large dinner. A number of the Fellows of the College were also present.

Immediately thereafter I returned to Chicago to attend the Congress, an account of which you will find in other parts of the Bulletin.

It was then necessary for me to make a hurried trip to the Pacific Coast. During that time, I was able to be in Los Angeles for a luncheon meeting with the General Chairman for the Eleventh International Congress to be held in Los Angeles in March of 1958. This was a very important meeting, as many of the plans have reached the stage where decisions must be made. The program is coming along in an excellent fashion.

The physical facilities for this Congress will be more than adequate. The banquet will be held in the famous Palladium, located in Hollywood. This promises to be a most interesting and spectacular affair and should attract a capacity house. The local committee is extremely active and the plans that have been made, to work with the standing committees of the Executive Council, will insure real success.

On the second of October, Doctor Harry Bacon and I embarked, by air, for Brazil. The Fourth Congress of the Brazilian Section was being held in the State of Bahia, at its capital city, Salvador. Salvador is the oldest city in Brazil and was its first capital. Historically, it is very interesting. It is said there are 365 churches in the city and I can well believe this. In order to reach Salvador, it was necessary to fly to Rio de Janeiro and then retrace our steps some thousand miles up the northern coast of Brazil to Salvador.

We were met at the airport by Doctor Santa Maria, President of the Brazilian Section, and Doctor Fernando Almeida, the latter to be our host through the ensuing days.

The scientific sessions were excellent. The papers were well presented and well discussed. At the Friday night session, Doctor Bacon exhibited one of his excellent motion pictures.

On Saturday, October 5, the House of Delegates of the Brazilian Section met to consider changes in their Constitution and By-Laws. Doctor Carlos Gama, President of the International College of Surgeons, arrived from Sao Paulo and took part in this meeting. Doctor Jorge Taiana, the President of the Argentine Section, Doctor Bacon and I were guests of the House of Delegates. It was also my privilege to say a few words at the closing scientific session of the Congress.

Saturday evening, at the closing session, the Governor of the State of Bahia eloquently greeted the assembly. Doctor Mario Degni, who assumed the Presidency of the Brazilian Section, delivered an admirable address, and Doctor Carlos Gama also spoke excellently. During this meeting the University of Bahia conferred an Honorary Degree on Doctor Max Thorek. Doctor Jorge Taiana accepted this degree for Dr. Thorek.

Doctor Gama, Doctor Taiana, Doctor Bacon and I attended a special meeting of the officers of the Brazilian Section to discuss ways and means of furthering the aims of the College in Brazil. This was a very harmonious and constructive meeting and it is hoped that much good will come from it.

At this point I wish to pay my respects to Doctor Jorge Taiana, President of the Argentine Section, who took a very active part in all the deliberations of the Congress, for his great contribution in helping with the plans for the South American Federation.

On Sunday much time was given to visiting churches and seeing the beauty of this ancient city. On Monday morning, Doctor Almeida came to the Hotel Bahia and took Doctor and Mrs. Eicens of Bucyrus, Ohio, who were visitors at the Congress, Doctor Bacon and me to the airport. We are very grateful to Doctor and Mrs. Almeida, who made our stay in Bahia a happy and memorable one.

Our return to the United States was uneventful. Upon our arrival in New York, we had flown some thirteen thousand miles in beautiful weather. Doctor Bacon and I hope that this long journey, in such a short space of time, will have good results and will prove that we were helpful to our friends in Brazil.

Ross T. McIntire

United States Section

THE PRESIDENT'S MESSAGE

About Going to Italy and Especially Florence

Dr. Curtice Rosser

If you can scorn the attractions of the jet age and go to Italy by steamship, you may travel in either of two ways: Direct to Naples from New York by way of the Mediterranean, which offers an opportunity to look for the Prudential sign on the Big Rock, and a pleasant nine- or ten-day sea voyage; or, from Paris through Switzerland to Vienna, then over the Semmering Pass and down to Venice.

In either case, the Italians have been polite enough to arrange their geography in such a manner that the four cities of special interest to the average traveler (and aren't we all average travelers?) lie in a straight line, with half-day train trips between them. They are Naples, Rome, Florence and Venice—and you can start equally agreeably at Naples or Venice. Naturally, you are not prohibited from making side trips to Pisa (and it really leans), to Boulogne, to Milan, etc., but that is unnecessary. There is, in Europe, never time enough to see *everything*, if you wish to have leisure as you go to enjoy what you see.

It is without any desire to proselyte those of different tastes that the writer acknowledges that while the azure of the vault above the Bay of Naples is as blue as a Texas sky on an early fall evening, Pompeii with its recovered treasures as intriguing as expected, the ruins of Rome exactly as pictured in his schoolbooks and the Rios of Venice as per postcard, Florence alone afforded something more—a charming mixture of natural beauty, of artistic genius, of romantic history. In other words, Naples, Rome, Venice, now represent a pleasant task accomplished in having been visualized. Florence among my souvenirs represents something just begun, a happy discovery to be enjoyed in the future.

Perhaps the lure of *Firenze*, which the Italians call the city, to a physician resides partly in the fact that much of the city is a monument to the industry, wealth and pride of the Medici family. The Medici who laid the foundations upon which the rest built was, as the name implies, a doctor, and his coat of arms bears a number of small red pills which testify to his regularity.

A technical knowledge of art is not a requisite to frank enjoyment in a place where masterpieces of statuary are found in the streets and in open loggias, where mile after mile of paintings representing every period and style can be seen in the two greatest existent galleries, the Uffizi and the Pitti, as well as in many smaller ones.

History is presented it its most attractive colors in a city where a casual stroll permits a glance at Dante's home with a plump cat sunning herself on the old well cover, an inspection of the tombs of Italy's illustrious dead at Santa Croce, where Machiavelli rests near Michael Angelo, and an awe-inspiring view of the lofty vault of the Medici memorial, which sums up the glory that was Florence.

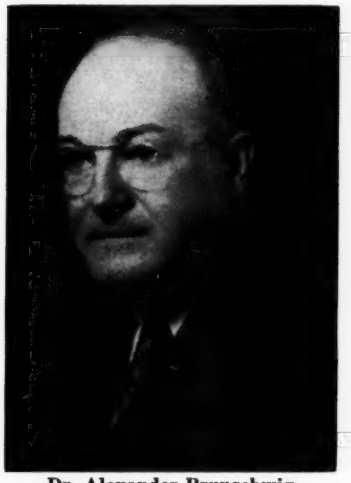
The city's attraction is not from immensity — a half hour walk will carry you from one end to the other—but these few acres contain half the art of the world, and represent the flower of a period of civilization.

Section News

UNITED STATES

DR. BRUNSCHWIG OFFICER OF FRENCH LEGION OF HONOR

Dr. Alexander Brunschwig, F.A.C.S., F.I.C.S. (Hon.), D.A.B., of New York, has received official notification of promotion to the rank of Officer in the French National Order of the Legion of Honor. By decree of the president of the Republic of France, the honor was bestowed upon Dr. Brunschwig "as a token of appreciation for the valuable services rendered by him to the cause of Franco-American co-operation in the field of medicine." Dr. Brunschwig, who was first awarded the Legion of Honor in 1950, grade Chevalier, is chief, gynecology service, Memorial Center for Cancer and Allied Diseases, and professor of surgery, Cornell University Medical College.



Dr. Alexander Brunschwig
F.A.C.S., F.I.C.S., D.A.B.

Dr. Brunschwig is Vice-President of the International College of Surgeons and member of its Board of Governors, as well as Vice-President of the United States Section. He has contributed much to surgery, and therefore much to human welfare.

Palmam qui meruit ferat. (Let him bear the palm who has deserved it.)

CANADA

DR. EASTMAN DEPLORES EXCESSIVE BIRTH PROCESS INTERFERENCE

Dr. Nicholson J. Eastman, F.I.C.S. (Hon.), professor of obstetrics at Johns Hopkins University and obstetrician-in-chief at the Johns Hopkins Hospital, in a lecture delivered recently at the Jewish General Hospital in Montreal under the auspices of the International College of Surgeons presented a statistical analysis of almost 8,000 births which indicated that babies who begin to cry and breathe immediately after birth have a much lower death rate than babies in whom breathing is delayed. Dr. Eastman's analysis further demonstrated that delayed breathing rises to four or five times the normal incidence when normal, spontaneous, deliveries are replaced by operative deliveries, and that the use of anesthetics and analgesics increases the hazard of delayed breathing.

Dr. Eastman's paper was discussed by **Dr. George J. Strean,** F.I.C.S., **Dr. Thomas Primrose,** and **Dr. Leon Gerin-Lajoie,** F.I.C.S., who agreed that Dr. Eastman's statistics confirmed the clinical impression of many obstetricians that the temptation to interfere too soon and too vigorously with birth processes should be resisted in the interest of the baby.

Woman's Auxiliary

THE PRESIDENT'S MESSAGE

A Kiss in the Dark

Mrs. Clifton L. Dance

I should like, by way of a timely vignette, to tell the story of the heading above. It was not a Victor Herbert type kiss, the kind that's "to him just a lark"; no, it was a kiss that could touch a resounding chord in the heart of every woman who has nurtured her surgeon through the early days of his practice and cherished him through the years as he worked to achieve his ideals and aspirations, one by one. Like all sweet things, I shall keep this for the last and tell you first about the events that led up to it.

The occasion was our Annual National Assembly, held in Chicago in September. Events have moved swiftly for our Woman's Auxiliary during the past year and great interest was shown at this Assembly in the progress we have made, particularly the contributions we have been able to make for postgraduate scholarships, studies in research, etc. We gained new members, many of whom felt that by affiliating with the Woman's Auxiliary they became more completely a part of their husband's sphere. Like charity, our good works begin at home and surely the surgical world is our particular province.

I am happy to report that many wives of the new Fellows and Associates inducted at the Convocation have already enrolled as members in the Woman's Auxiliary. I hope, in the next issue of the Bulletin, to have a complete list of the names of all members who joined during 1957.

Our Hospitality Center in the Palmer House was more popular than ever; even the men joined us there. It was wonderful to see women who had met the previous year as new aquaintances greet each other in this charmed circle as friends, genuinely glad to meet again.

For those who were not able to attend this Twenty-Second Congress, I would like to share the thrill of a dramatic moment which happened at a special program arranged by the Woman's Auxiliary and which took place in the Hall of Fame. **Dr. Thorek,** who was our speaker, had shown us beautiful stereopticon slides, in color, of the various rooms in the Hall of Fame, furnished with rare and precious surgical memorabilia from the various countries affiliated with the International College of Surgeons. Then he showed the vivid paintings and murals depicting the history of Surgery which were painted especially for the Hall of Fame.

"And this is the last one," he said very simply. There flashed on the screen a striking picture of a lady seated at a small table. Her burnished red hair, her captivating eyes, her slender hands, stirred something within me. The picture looked classic, like some great lady out of the past, and yet we felt somehow that we had seen her, that we had known her. Dr. Thorek continued quietly, "Yes, my Fim, my sweetheart." I do not recall his exact words but we all know them, for he has said them many times—that she has been his inspiration and his mainstay.

The painting hangs in the library, which she and her husband have so richly en-

dowed, in the Hall of Fame, a fitting place for this truly gracious lady.

This is a good opportunity to pay tribute to all ladies who willingly gave of their time to help the Woman's Program. Our officers and committees are well known, but many of the more modest ones are not. Let me mention one of them who goes beyond the line of duty and has done so for the past six years. She is **Mrs. Evan Garrett,** of Niles, Michigan. Often she foregoes the pleasures of attending luncheons and other events just so the Registration Desk does not remain unattended. Our special thanks to her.

As your President, I encountered a new experience which I confess I thoroughly enjoyed. Many of our members and even the busy surgeons, hurrying to their lectures, stopped me and greeted me warmly with words of praise for our Auxiliary and our page in the Bulletin. They recognized me from the small picture on the President's page. I was pleased as punch when no less a person than **Dr. Claude J. Hunt,** whom I had not met before, greeted me out of the clear and told me that he looked for the Woman's Auxiliary page each time he received the Bulletin and he always enjoyed it. My sincere hope is that we attract and interest new members to help carry out our great plans. If every Fellow and member of the International College of Surgeons were represented in our Auxiliary by at least one member of his family we could have a great Auxiliary. On the next page we have a printed application form which may be cut out and mailed to

Mrs. Walter Burket, former president of the Woman's Auxiliary to the International College of Surgeons; Mrs. Paul C. Craig, president of the Woman's Auxiliary to the American Medical Association; Mrs. Clifton L. Dance, president, and Mrs. Earl I. Carr, president-elect, of the Woman's Auxiliary to the International College of Surgeons, chatting for a moment in the International Surgeons' Hall of Fame.

us. Applications received now will cover membership for next year, 1958.

And now I come to the Convocation. This was a memorable one, and I take the liberty here to congratulate all who made the arrangements and those who carried them out. It went as smoothly as a professional performance. The pageantry at our Convocations is always moving and colorful. The sight of those earnest-looking nurses, clad in white, each bearing the flag of a sister nation, coming down the center aisle is thrilling to behold and to contemplate.

But the most impressive and significant part of the Convocation was the long file of the Candidates themselves. They came down the aisle, serious, in their caps and gowns, the varied colors of their Universities showing in their hoods. Led by **Dr. Walter Burket,** who carried the Mace, they marched, from every State in the Union. Here were men, surgeons of high standing in their own communities. Many of them teachers and professors in the Surgical Schools of our great Universities. Many of them already Fellows in other Surgical Colleges of renown. Yet here they were marching in file to receive their diplomas and take their pledge to the International College of Surgeons. As they stood up in a solid body, bareheaded now, to take the pledge, hand on heart, something akin to awe crept over me, awe mixed with pride and gratitude for these noble Fellows. Many of them were men in their forties or fifties—a goodly sprinkling of older men well in their sixties. Here was a body of men dedicated to humanity.

We left the Opera House, where the Convocation had taken place (my husband and I) and we walked around the corner in search of a taxi. There we encountered that grand southern gentleman **Dr. Gilbert Douglas,** with his party, and we enjoyed a few moments of happy conversation. Cabs were slow in coming; the air was fresh after the rain; so my husband and I decided to walk part way.

Just ahead of us a man and a woman were walking, and, as we grew accustomed to the dim light on the otherwise deserted street, we could see that the man carried a college gown over his arm and the woman carried his cap. The gold-colored tassel swung back and forth in rhythm with their steps.

Then it happened. Without a word, they stopped. He bent his head, she lifted hers. Tenderly, oh, so tenderly, they kissed. Spontaneous, born of the moment, that kiss was the pure essence of all that man strives for and all that woman dreams of. A tempered ecstasy enveloped them as they linked their arms more closely and resumed their walk.

The magic of the moment took us back some years, to the night my own good husband became a Fellow of the International College of Surgeons. I could feel again the sense of reward and pride I felt that time. Our own steps seemed to synchronize into a lilting step.

I did not see the face of the lady in front of me, but I think hers is the face of countless other women whose husbands became Fellows that night. I do hope we shall have the privilege and pleasure of welcoming them all into our Auxiliary.

Catherine M. Dance

I apply for membership in the Woman's Auxiliary of the United States and Canadian Sections of the International College of Surgeons.

NAME .....

ADDRESS .....

Annual dues Ten dollars. Make check payable to the Woman's Auxiliary of the United States and Canadian Sections, I.C.S. Mail to 1516 Lake Shore Drive, Chicago 10, Illinois.

Announcing

CONGRESS OF THE EUROPEAN FEDERATION OF THE INTERNATIONAL COLLEGE OF SURGEONS

Brussels, Belgium

May 15-18, 1958

Preliminary Program

I. OPENING SESSION

Moral Relations of Patient and Surgeon.

II. SCIENTIFIC PROGRAM

1. **So-called Diseases of Civilization, and the Role of Surgery in their Treatment.**
2. **Diseases of Atomic Origin, from the Viewpoint of the Internist and Surgeon.**
3. **The Pathology of the Ampulla of Vater and Contiguous Structures.**
4. **Pitfalls in the Treatment of Fractures of the Upper Limb.**
5. **Surgery of the Genito-Urinary Tract.**
6. **Miscellaneous Subjects:**
   Human Tissue Banks
   Surgery of the Oesophagus
   Head Injuries, etc.

CONGRESS DE LA FEDERATION EUROPEENNE DU COLLEGE INTERNATIONAL DE CHIRURGIENS

Bruxelles: du 15 au 18 mai 1958

Programme Provisoire

I. SEANCE INAUGURALE

Relations morales entre le malade et le chirurgien.

II. PROGRAMME SCIENTIFIQUE

1. **Les soi-disant maladies de la civilisation et le rôle de la chirurgie dans leur traitement.**
2. **Les maladies d'origine atomique, du point de vue de l'interniste et du chirurgien.**
3. **La pathologie du carrefour Vatérien.**
4. **Les pièges de traitement des fractures du membre supérieur.**
5. **Chirurgie du sympathique génito-urinaire.**
6. **Communications particulières: banques de tissus humains, oesophage, traumatismes du crâne, etc.**

CONGRESSO DELLA FEDERAZIONE EUROPEA DEL COLLEGIO INTERNAZIONALE DI CHIRURGIA

Brussels dal 15 al 18 Maggio, 1958

Programme Provvisorio

I. SEZIONE INAUGURALE

Relazione morale tra il malato e il chirurgo.

II. PROGRAMMA SCIENTIFICO

1. **Come si chiamano le malattie della civilizzazione e il ruolo della chirurgia nel loro trattamento.**
2. **La malattie di origine atomica dal punto di vista dello internista e del chirurgo.**
3. **La patologia dell'ampolla di Vater.**
4. **Le piaghe da trattamento delle fratture dell'arto superiore.**
5. **Chirurgia del simpatico genito-urinario.**
6. **Comunicationi particolari:**
   banca del tessuto umano
   chirurgia del esofago
   traumatismo del cranio, etc.

KONGRESS DER EUROPÄISCHEN FEDERATION DES INTERNATIONALEN CHIRURGENKOLLEGIUMS

Brussel, 15.-18. Mai 1958

Provisorisches Programm

I. INAUGURAL SITZUNG

Die Moralischen Beziehungen zwischen dem Parienten und dem Chirurgen.

II. WISSENSCHAFTLICHES PROGRAMM

1. **Die sogenannten Zivilisations-Krankheiten, und die Rolle des Chirurgen in deren Behandlung.**
2. **Die Erkrankungen atomischer Herkunft, vom Aussichtspunkt des Internisten und des Chirurgen.**
3. **Die Pathologie des Vater'schen Kreuzweges.**
4. **Die Fallen der Behandlung der Knochenbrüche der oberen Extremität.**
5. **Die Chirurgie des Genito-Urolog. Sympathicus.**
6. **Freie Mitteilungen.**

Die Anmeldungens sind sobald als möglich—sowohl für das wissenschaftliche Programm als für die Hotel Reservation (der Kongress findet während der grössten Weltausstellung seit dem Krieg statt) zu schicken an:

Dr. Georges Van Keerbergen, 50, rue de la Loi, Bruxelles (Belgien) oder an das Sekretariat des I.C.S. in Genf. (Schweiz) 6-8, rue de la Confédération.

Scientific Session of the Meeting of the Belgian Section, Liege, April 6-7, 1957

Dr. Leopold Lambert
President
Opening the Meeting

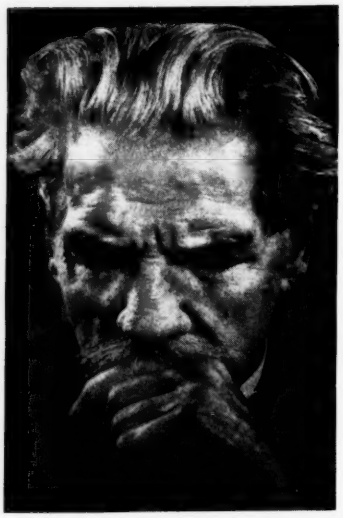
At the official reception in the City Hall: Mme Sondervorst; Mme Darget; Dr. Sondervorst, Secretary; Dr. Van Keerbergen, Vice-President; Prof. Darget; Prof. Swynghedauw; Prof. Pauwels; Prof. Herzog; Dr. Lambert, President; Mme Lambert; and Mme Oltramare.

Burgomaster Gruselin extending greetings; at his left, Dr. Sondervorst, Prof. Darget, Prof. Swynghedauw (France), Prof. Pauwels, Prof. Herzog (Germany), Dr. Lambert, Mme Lambert, Prof. Christophe, and Prof. Oltramare.

Sections Abroad

FRANCE

Dr. Albert Schweitzer at Bordeaux



Dr. Albert Schweitzer

Albert Schweitzer, M.D., Ph.D., D.D. (Hon.), L.L.D. (Hon.), F.I.C.S. (Hon.), upon his arrival recently at Bordeaux, France, from Lambaréné, French Equatorial Africa, conferred at length with two Fellows of the International College of Surgeons. He met them with utmost simplicity but, it is reported, also with warmest cordiality.

Prof. Dr. Raymond Darget, F.I.C.S. (Hon.), secretary and member of the International Board of Trustees, International College of Surgeons, and **Dr. Jacques P. A. Crozat,** F.I.C.S., visited Dr. Schweitzer at his hotel apartment. The conference was private and intimate, the press being strictly excluded.

Dr. Schweitzer discussed with Dr. Darget and Dr. Crozat many details of his work at the Lambaréné Hospital and many of the latest developments in medicine and surgery.

Dr. Darget presented to Dr. Schweitzer a medal commemorating the 1952 Congress of the International College of Surgeons at Bordeaux. Dr. Schweitzer examined it with interest.

The Nobel Prize winner and universal genius acknowledged with gratitude his election to honorary membership in the International College of Surgeons, and expressed his pleasure in being associated with this world-wide fellowship of surgeons.

THAILAND

The annual National Meeting of the Thai Section of the International College of Surgeons will begin on November 23, 1957, at the Grand Auditorium of the Priest Hospital. The Premier of Thailand will preside over the opening ceremonies of the Scientific Meeting.

A banquet will follow in the Dining Hall of Women's Hospital in Bangkok. Several scientific sessions will be held concurrently with those of the Department of Medical Service.

Sem Pring-puang-geo, M.D., F.I.C.S., is secretary of the Thai Section.

Medical News Front

POSTGRADUATE COURSES IN PEDIATRIC CARDIOLOGY

The Cook County Graduate School of Medicine, Chicago, Illinois, is offering two one-week intensive, practical postgraduate courses in pediatric cardiology for a limited number of physicians. The regular teaching faculty will be supplemented by distinguished guest lecturers.

COURSE I, on the Diagnosis and Treatment of Congenital and Rheumatic Heart Disease in Infants and Children, given by **Dr. Benjamin M. Gasul, Dr. Egbert H. Fell** and associates, will start on December 2. It is designed to be of interest to pediatricians, internists, and general practitioners dealing with these problems. Emphasis will be given to actual examination and study of patients and case histories. Lectures will be presented in direct association with bedside work.

COURSE II, on Roentgenology and Electrocardiography, Angiocardiography and Catheterization of the Heart and Great Vessels in the Diagnosis of Congenital and Acquired Malformations in the Hearts of Infants and Children, given by **Dr. Benjamin M. Gasul, Dr. Robert F. Dillon** and associates, will begin on December 9. The course is designed for the pediatrician, roentgenologist and internist working in this field.

The value and limitations of the various procedures and findings will be demonstrated and discussed with respect to various ages from the newborn through adolescence. Cases will be presented in which the diagnosis has been confirmed by a correlated study of the history, physical examination, angiocardiography, catheterization, surgery, and in some cases by autopsy findings. Electrocardiograms using 15 leads will be employed.

SOUTHERN THORACIC SURGEONS TO MEET

The Southern Thoracic Surgical Association will meet November 29-30, 1957, at the Roosevelt Hotel, New Orleans.

Dr. Hawley H. Seiler, 517 Bayshore Boulevard, Tampa 6, Florida, is secretary of the association.

TENTH ANNIVERSARY OF THE WORLD MEDICAL ASSOCIATION

The tenth anniversary of the founding of the World Medical Association was observed at the General Assembly of the Association in Istanbul, Turkey, which began its deliberations on September 29.

The fifty-three component medical associations, however, held their own celebrations on September 18, the actual date of the founding of the Association. Special celebrations were held in Paris, London, and New York.

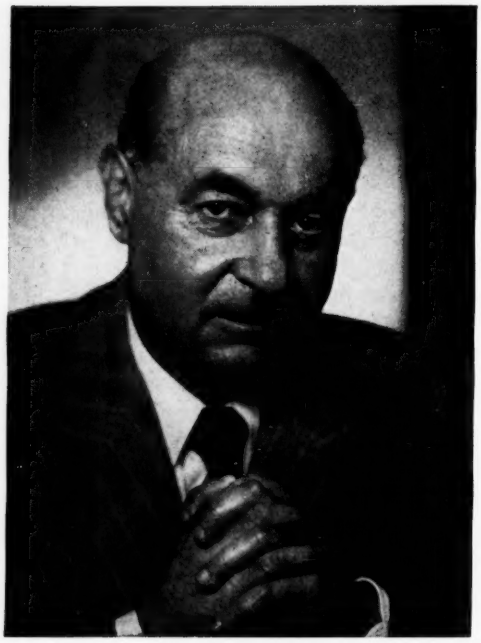
OPHTHALMOLOGISTS CONFER WITH SOCIETY FOR THE PREVENTION OF BLINDNESS

The Fourth Interim Congress of the Pan-American Association of Ophthalmology met with the National Society for the Prevention of Blindness in New York City, April 7-10, 1957.

The scientific sessions of the Pan-American Association dealt with diseases of the ocular fundus, ocular surgery, and ocular therapy. Several members of the International College of Surgery took leading parts in the proceedings. **Dr. William R. Huston,** F.I.C.S., D.A.B., Mansfield, Ohio, presided over the panel discussion on the fundus, and **Dr. Irving H. Leopold,** F.A.C.S., F.I.C.S., of Philadelphia, led the symposium on therapy. Among the Latin-American physicians who delivered official papers was **Dr. Jesus Rhode,** F.I.C.S., Carácas, Venezuela.

In Memoriam

MASTER SURGEON FELIX MANDL, M.D., F.I.C.S. (Hon.)
Secretary, Austrian Section
1892-1957



Prof. Dr. Felix Mandl, F.I.C.S. (Hon.)

On October 18, 1957, the Joint Federation Meeting of the German, Swiss, Dutch and Austrian Sections of the International College of Surgeons met in Vienna. It was to have been not only a serious scientific session but a festive one as well. Dr. Mandl's approaching sixty-fifth birthday was to be joyously celebrated in the city which had been the scene of his medical studies and training, of his early achievements in surgery, of his heart-broken departure at the outbreak of World War II and of his dramatic return in 1947 after an absence of seven years. Instead, it was an occasion of profound grief. The November issue of the *Journal of the International College of Surgeons,* which had been planned as a *Festschrift,* a tribute of esteem from doctors and surgeons the world over, had to be rededicated to his memory. The Editor-in-Chief of the Journal, cabling these instructions to the editorial office, added the word CRUSHED, voicing the pervading mood of mingled shock and sorrow.

Dr. Mandl was born in Brünn, Moravia, on Nov. 8, 1892, and was educated in Vienna. In 1919 he received the degree of Doctor of Medicine, and in 1922 he was appointed Assistant Surgeon at the Surgical University Clinic, under Prof. von Hochenegg, Vienna. He served as Chief Surgeon at the Canning-Childs Hospital and Research Institute from 1932 to 1938.

At the outbreak of war, in 1939, he left Vienna. He settled in Palestine, where he was welcomed most warmly, and invited to become chief surgeon at the Hadassah University Hospital in Jerusalem, a post he occupied for seven years.

In 1947 Dr. Mandl returned to Vienna. Since that time he had been head of the Surgical Department of the Franz Josef Hospital.

At the time of his death Dr. Mandl was serving with distinction and devotion as a member both of the International Board of Governors and the International Executive Council of the International College of Surgeons and as a member of the Editorial Board of the Journal.

We shall miss his help and his counsel greatly and mourn long the death of a good friend, a distinguished surgeon, and a great man.

(See detailed report in Journal.)

In Memoriam

JACOB GOLDSTEIN, M.D.
F.R.C.S. (Can.), F.A.C.S., F.I.C.S., D.A.B.
1906-1957

New Year's day saw the death of Dr. Jacob Goldstein, a specialist in obstetrics and gynecology in his native city of Toronto for twenty years.

Born in 1906, Dr. Goldstein received his education at Harbord Collegiate and the University of Toronto, graduating in Arts and Medicine in 1930. After six years' postgraduate work at the Cincinnati Jewish, Bellevue, and Margaret Hague Hospitals, he set up practice in 1936. He developed a large and successful practice and during his career he became a member of the Society of Obstetricians and Gynecologists of Canada, certified by the Royal College of Surgeons of Canada, as well as the American Board of Obstetrics and Gynecology. He was a Fellow of the American College of Surgeons, International College of Surgeons and the American College of Obstetrics and Gynecology.

His zest for living and limitless energies were a constant source of stimulation to his colleagues and interns alike. His kindly personality endeared him to many thousands of patients throughout the city. The eternal student, his face was familiar at medical conventions throughout Canada and the United States.

He was a frequent contributor to medical literature, and the past several years was Senior Attending Obstetrician and Gynecologist at the New Mount Sinai Hospital.

He leaves his wife, the former Rose Staiman, and three charming daughters.

He is greatly missed by his friends, colleagues and patients. His unlimited courage during his last illness, when he worked to within a few days of his death, will stand as a memorial to his fine character.

Ernest N. C. McAmmond

DAN MELLEN, M.D., F.A.C.S., F.I.C.S.
1889-1957

Dr. Dan Mellen, of Rome, New York, past president of the New York State Medical Society, died on September 2, 1957, in the Genessee Hospital, Rochester, New York.

Dr. Mellen got his premedical education at the Universities of Rochester and Buffalo. His medical degree is from the University of Buffalo. He served as an intern at the Buffalo General Hospital, and then took four years of postgraduate work in surgery at the Mayo Clinic. Later he did postgraduate work in urology at the University of Minnesota.

In 1923 Dr. Mellen established his private practice in Rome, New York. He was associated with the Colonial Hospital and St. Mary's Hospital of Rome.

Dr. Mellen was cited for outstanding service by the University of Buffalo in 1953 and last year he received the annual Distinguished Service Award of the Utica Academy of Medicine.

Dr. Mellen was a past president of the Mayo Clinic Alumni Assn.

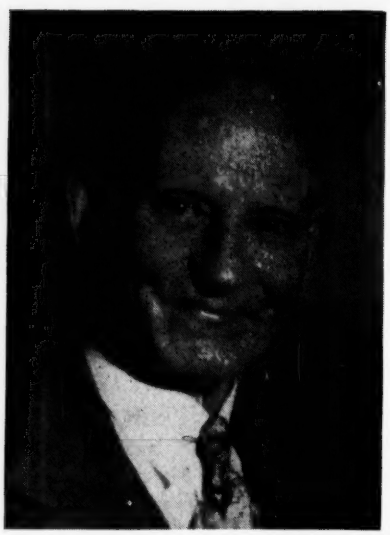
He was a member of the Oneida County Medical Society, of which he was a past

In Memoriam

president; the Fifth District Branch of New York, of which he was also a past president; the Central New York Surgical Society, the American College of Surgeons, the Northeastern Section of the American Urological Society, the International College of Surgeons, the American Medical Assn. and the World Medical Assn.

Dr. Mellen was also a member of the Joint Hospital Survey and Planning Commission of the Syracuse Regional Hospital Planning Council, and was a member of the Council of the Medical Society of the State of New York since 1945, serving two terms as chairman of the Board of Trustees.

HOWARD BARBOR BUTERBAUGH, M.D.
F.A.C.S. F.I.C.S.
1871-1957



Dr. Howard Barbor Buterbaugh
F.A.C.S., F.I.C.S.

Dr. Howard B. Buterbaugh, life member of the International College of Surgeons, died on August 6, 1957, in the hospital of his home city of Indiana, Pennsylvania.

Dr. Buterbaugh was 86 years old and had practiced medicine continuously for 62 years. During the morning of the day he died he had made his usual round of visiting patients.

He was born in Cookport, Pennsylvania, May 12, 1871. He received his M.D. degree from Western Reserve University in 1895. At the time of his death he was Dean of the Indiana (Pennsylvania) Hospital staff.

During World War I Dr. Buterbaugh served with the A.E.F. in France, as Major in the Army Medical Corps.

Returning to the United States, he did postgraduate work in New York, and since 1920 served on the eye, ear, nose, and throat special surgical staff of the Indiana Hospital. For a time he taught in the Indiana School of Nursing. He also was a surgeon for the Conemaugh Division of the Pennsylvania Railroad and was a member of the Association of Railroad Surgeons.

He traveled in Europe and attended meetings of the International College of Surgeons, abroad, as well as in the United States.

Dr. Buterbaugh gave generously of his time and effort to public and community affairs.

COLLEGE INTERNATIONAL DE CHIRURGIENS
GENEVE 35
FOUNDED BY DR. MAX THOREK

The Journal of the International College of Surgeons

FOUNDED BY DR. ANDRE' CROTTI

Section II

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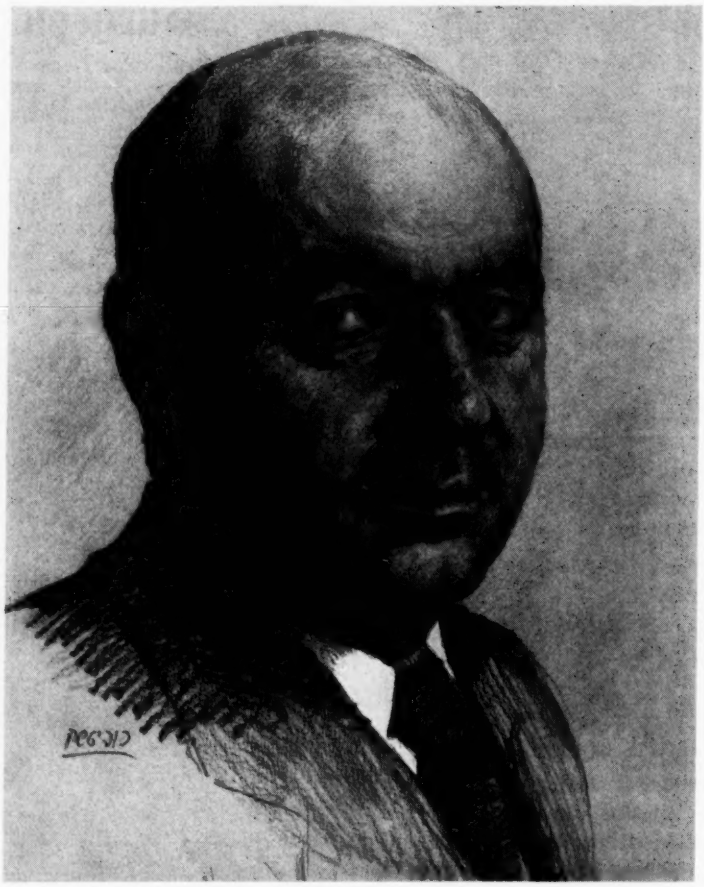
Reverently Remembered



MASTER SURGEON FELIX MANDL, M.D., F.I.C.S. (Hon.)
Secretary, Austrian Section
1892-1957

Eleventh Biennial International Congress

INTERNATIONAL COLLEGE OF SURGEONS

In Conjunction With

Twenty-Third Annual Congress

NORTH AMERICAN FEDERATION

(Canada, Mexico and United States Sections)

Two firsts—a Far Western setting and an early spring date—mark next year's International and North American Federation Congresses, which will be held concurrently in Los Angeles, California, March 9-14, 1958, at The Ambassador Hotel.

West Coast members of the College, imbued with the vibrant enthusiasm of General Chairman **Dr. Jose M. de los Reyes,** Southern California Regent, are exerting every effort toward making this first worldwide Congress in their area a memorable success.

Nearly all areas of the United States can expect good weather in September, but few can be as confident as Southern California that March will be mild and salubrious. Our 1958 hosts are counting a great deal on this psychological lure among our colleagues practicing in harsher climes.

Several innovations designed to increase both the scientific and recreational values of the Congress are promised under Dr. de los Reyes' energetic leadership.

Scientific papers have been meticulously scrutinized and are being organized into a well-rounded program.

The Herbert Acuff Memorial Lecture, which periodically invokes for us the remembered presence of one of our great leaders who served us both as president of the United States Section and as president of the College, will be delivered by **Claude S. Beck,** M.D., Sc.D., F.A.C.S., D.A.B., of Cleveland, Professor of Cardiovascular Surgery, Western Reserve School of Medicine.

Another extraordinarily important event was decided upon by the Executive Committee of the United States Section. Arrangements are now being completed for the presentation of a panel on Surgical Emergencies, particularly directed to members of the American Academy of General Practice. It will be a valuable refresher course and bring sharply into focus the latest and most approved procedures in the treatment of emergencies. It will also be an expression of our conviction that General Practice is a specialty, an integral and exceedingly important part of the practice of medicine.

Men outstanding in their specialties will participate in the presentation, thus assuring the presence of a panel of distinction and competence. **Dr. George B. Lull,** F.A.C.S., F.I.C.S. (Hon.), Secretary of the American Medical Association, will open the discussion. **Dr. Ross T. McIntire,** F.A.C.S. (Hon.), F.I.C.S. (Hon.), Executive Director of the International College of Surgeons will be moderator.

Special pains will be taken to assure doctors' wives that they will not lack for entertainment, both on a group basis and by individual choice. And for the family, fabulous Disneyland and the celebrated Knott's Berry Farm "Ghost Town" are less than an hour's ride from The Ambassador.

Present plans include many possibilities for pleasure and entertainment to suit

every variety of taste and inclination. Mrs. **Clifton L. Dance,** President of the Woman's Auxiliary to the International College of Surgeons, the chairmen of committees and the committee members are agreed that no effort is to be spared to make this Congress truly memorable as a social occasion, pleasant and exciting to a degree that is without precedent.

Post-Congress Tours

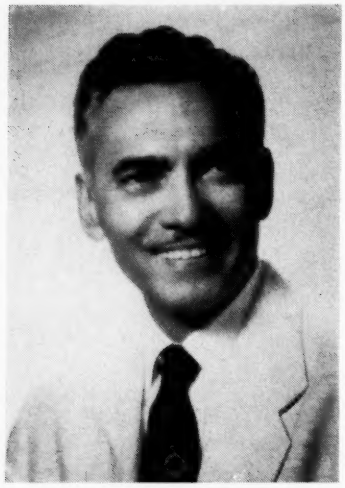
A number of tours have been so arranged as to serve the purpose of everyone who attends the Congress. Accommodations are available for surgeons and their families to conform with the time they have at their disposal. There are tours of the West Coast, of the Mission Trails and of the Yosemite Valley which can be arranged for in combination with transportation to and from Los Angeles.

Chief of the Post-Congress Tours is the trip by air or boat to Hawaii, which can be a twenty-two day Cruise Tour or a twenty-two day Air and Sea Tour; a sixteen-day Air Tour or a ten-day Air Tour. All will include a day at Queen's Hospital as guests of the Hawaiian Section of the International College of Surgeons. **Dr. Ralph B. Cloward,** F.A.C.S., F.I.C.S., D.A.B.; **Dr. Clarence E. Fronk,** F.A.C.S., F.I.C.S.; **Dr. Nils P. Larsen,** and other surgeons are organizing a clinical instruction and demonstration day at the hospital that promises to be very interesting.

Inquiries concerning the Congress should be addressed to the Secretariat, International College of Surgeons, 1516 N. Lake Shore Drive, Chicago 10, Illinois.

Inquiries concerning travel and Post-Congress Tours should be addressed to International Travel Service, 119 South State Street, Chicago 3, Illinois.

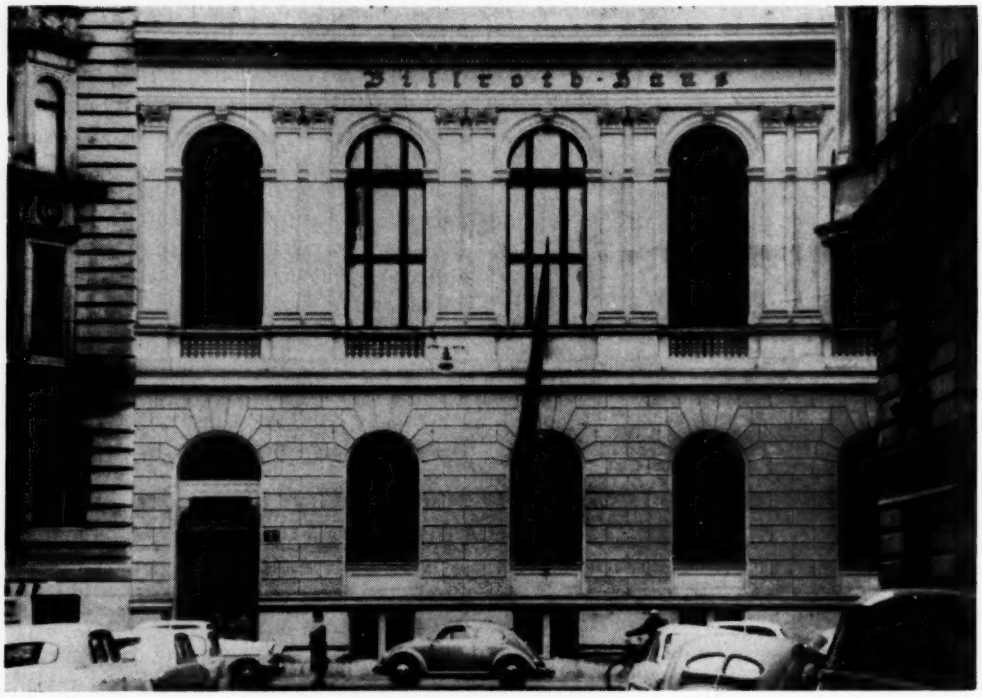
Dr. Joseph de los Reyes



Dr. Joseph de los Reyes
F.A.C.S., F.I.C.S.
General Chairman

Dr. Joseph de los Reyes, F.A.C.S, F.I.C.S., Associate Secretary and Regent for California, United States Section, International College of Surgeons, is the General Chairman of the Eleventh Biennial International Congress of the International College of Surgeons to be held in conjunction with the Twenty-Third Annual Congress of the North American Federation (Canadian, Mexican and United States Sections).

Dr. de los Reyes is President of the California State Board of Examiners, Vice-President of the Los Angeles County Medical Association, Chairman of the Los Angeles County Medical Association Public Relations and Public Policy Committee, Founder and First President of the Los Angeles Surgical Section of the Los Angeles County Medical Association, Surgical Editor of *Annals of Western Medicine and Surgery,* and member of the Governor's Committee for the Physically Handicapped.



Billroth-Haus, Vienna, scene of the First Congress of the European Federation of the International College of Surgeons, with black flag of mourning for Prof. Dr. Felix Mandl, F.I.C.S. (Hon.), Secretary of the Austrian Section

First Congress of European Federation

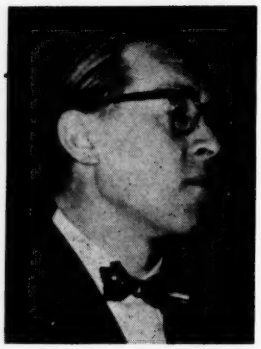
INTERNATIONAL COLLEGE OF SURGEONS

The First Congress of the European Federation of the International College of Surgeons was held October 18-20, 1957, at the Billroth-Haus in Vienna, with the Austrian, the Netherlands, the German and the Swiss Sections participating.

The mood of the Congress was deeply saddened by the tragic death of **Prof. Dr. Felix Mandl,** Secretary of the Austrian Section, who, after organizing the Congress, fell victim to influenza four days before it convened.

Dr. Leopold Schönbauer, President of the Austrian Section, opened the Congress, extending greetings to the many foreign guests, surgeons not only from Europe but from the United States. Among the visitors from overseas, **Dr. Max Thorek** of Chicago, Founder and Secretary General of the College, was welcomed with special cordiality and affection.

The assembly was addressed by **Nat. Rat Anton Prokosch,** Federal Minister for Social Administration; **Buergermeister Franz Jonas,** speaking for the city of Vienna; **Dr. Heinz Schenk,** representing



Prof. Dr. George Chapchal
President
The Netherlands Section

the University of Vienna, and **Dr. Arnold Pillat,** of its Faculty of Medicine, all of whom welcomed the Congress very heartily.

Prof. John H. Oltramare of Geneva, Secretary General of the European Federation; **Docent George Chapchal** of Utrecht, President of the Netherlands Section; **Prof. A. W. Fischer** of Kiel, President of the German Section, and other delegates stressed the importance of the European Federation of the International College of Surgeons.

The opening session heard in moved silence an address, read by his assistant, which Prof. Mandl had prepared for the Congress during his illness.

Special Scientific Addresses

Prof. Rudolph Nissen of Basel, Switzerland, Past President of the International College of Surgeons, reported on surgery of the cardia for various benign and malign lesions, such as diaphragmatic hernia, achalasia of the cardia or reflux esophagitis.

Dr. Schönbauer spoke on the investigations carried out in his clinic on the content of carcinogenic substances in different articles of food, with special regard to certain lipids after exposure to high temperatures for various periods.

Dr. Chapchal delivered the third special address at the afternoon session, reporting on operations for reconstruction and mobilization or arthrodesis of the hip joint. The principal problems and the technical details were outlined.

Prof. Fischer presented the final special address on Saturday, dealing with indications for re-laparotomy. He expressed disapproval of reliance on laboratory data alone, and advised that decisions be made in every case only after a thorough study of the clinical picture. For postoperative hemorrhage after gastric resection he recommended a rather conservative attitude. Before re-laparotomy, he cautioned, lost blood should be replaced by blood transfusion and bleeding controlled by the use of hemostatic agents such as thrombin.

Modern Therapy of Carcinoma

Dr. Maarten Vink of Utrecht spoke on free carcinomatous cells and their surgical importance. By thorough clinical investigations the malignancy of free carcinoma cells in the colon was estimated with and without the use of drugs to sterilize the intestine.

Prof. Werner Schulze of Kaiserslautern, Germany, reported on the first results after use of the new cytostatic agent, Tetramine.

Dr. Kurt Boshamer of Wuppertal-Barmen, Germany, and **Prof. R. Übelhöer** of Vienna outlined in their lectures the use and the value of chemotherapeutic and cytostatic agents for carcinoma of the urinary bladder and for other neoplastic conditions of the urogenital tract.

Operative treatment of carcinoma of the uterine cervix was reported on by **Prof. H. Knaus** and **Prim. Dr. H. Högler,** both of Vienna, who demonstrated that the operative mortality rate of transabdominal radical as well as vaginal radical operation can be kept within low limits. Follow-up results were presented.

Pathologic Conditions of Bone

Mr. Leb, Radiologist of Graz University, the opening speaker on the subject, dealt with radiotherapy of various bone tumors.

Dr. Friedrich Bethge of Hamburg presented a paper, which was followed by animated discussion, on the question of whether radiotherapy is to be recommended for giant cell tumors. A contribution to the understanding of the problem was contained in a paper on malignant degeneration of localized ostitis fibrosa cystica, which had been written by Dr. Mandl for the occasion and was read by **Mr. Fritsch.**

Prof. R. Ullik of Vienna reported on tumors of the maxilla. **Dr. Rainer Gottlob** of Vienna presented some observations on diabetic bone lesions. He pointed out that in the presence of neuropathic condition in a diabetic patient, as in the presence of other lesions of the nervous system, arthritis mutilans may develop.

Errors in Diagnosis and Therapy

Dr. P. Huber of Innsbruck pointed out that a goiter may escape diagnosis when it is situated in the trachea or in the thorax, or when in a recurrent goiter the expansion of an adenoma is prevented by scars.

Dr. Wilflingseder, also of Innsbruck, discussed the failures that may be experienced when tests with radioactive iodine are carried out in regions with endemic goiter. He recommended the determination of the basal metabolic rate under barbiturate anesthesia.

Prof. F. Starlinger of Vienna reported on possible errors in the surgical treatment of biliary tract lesions.

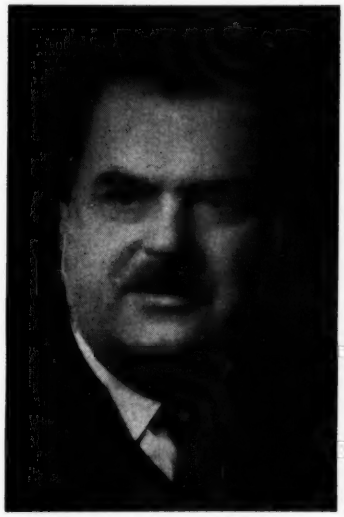
Prof. Oltramare described 3 cases of volvulus of the stomach in which the condition was caused by various lesions of the large intestine consequent to enlargement of the colon.

Dr. Mester outlined the advantage as well as the danger of prolonged use of the Cantor tube in cases of intestinal obstruction.

Prof. Knaus discussed the diagnosis of "terminal ileitis." In the ensuing discussion Prof. Nissen pointed out that, instead of the term "ileitis terminalis," it would be better to substitute the term "ileitis regionalis." He advised that the condition be treated medically. **Dozent P. Fuchsig** of Vienna observed favorable results after infiltrating the root of the mesentery with procaine. **Prof. A. Plenk** of Linz stressed that radiologic diagnosis of terminal ileitis may be extremely difficult.

Prof. Übelhör observed some untoward reactions after prolonged therapy with male sex hormones for retention of the testicles. **Dr. Marberger** of Innsbruck discussed pitfalls in the diagnosis of carcinoma of the prostate.

Dr. V. Grünberger of Vienna emphasized the importance of thorough exploration



Prof. Dr. Leopold Schönbauer
President
Austrian Section

when tumors of the ovaries are found that may be metastatic in orgin.

Dozent O. Novotny of Vienna demonstrated the damage that may ensue when injuries to the frontal sinuses are not adequately treated. **Prim. Dr. E. H. Majer,** also of Vienna, recommended that in cases of fracture of the base of the skull an otorhinolaryngologist be called.

Dozent Herbert Kraus of Vienna presented an analysis of possible errors in neurosurgery. He pointed out that in cases of bitemporal anopsis surgical intervention is indicated, but that no operation for angioma or aneurysm of cerebral arteries should be carried out without artificial hypotension.

Dr. Kubicek of Vienna reported that in about 4 per cent of all myocardial infractions abdominal symptoms alone are noticed.

Prim. Dr. Jorg Böhler of Linz and **Drs. Titze** and **Riess** of Graz discussed possible errors in orthopedic surgery and their correction.

These presentations were followed by a number of free communications.

Dr. Trojan of Vienna demonstrated a series of traumatic injuries (luxation of the hip joint, fractures of the lower extremity and fractures of the navicular bone of the hand) and discussed the therapy. **Dr. Otto Verbeek** of Amsterdam spoke on the treatment of pseudoarthrosis by osseous homografts and **Dr. Max Kurt Herzog** of Krefeld-Uerdingen, Germany, demonstrated the application of the Rohrschlitznagel, a newly devised marrow nail. In the ensuing discussion Dr. Böhler stated that he does not recommend marrow nailing of a fracture of the tibia, especially if the fracture is complicated. **Dr. A. Dimtza** of Zurich reported on vascular lesions as caused by sports injuries, and **Dr. H. Nigst** of Basel said that his experimental and clinical investigations had established the fact that scar formation at the site of nerve suture can be diminished by the application of cortisone.

Prof. Schulze gave an account of his success in preventing intra-abdominal adhesions by intraperitoneal infusions of Periston 7 per cent. **Dr. Fries** of Stockholm mentioned his investigative work in the prevention of adhesions by intraperitoneal application of polyphloretinphosphate.

Dozent O. Bsteh of Mistelbach spoke on the formation of postoperative talcum granuloma.

Dr. F. Heppner of Graz dealt with aneurysm of the anterior communicating cerebral arteries. He reported that in 4 cases this lesion had been cured by operation.

Dr. Herbert Dworacek of Vienna discussed operative treatment of impaired hearing with special reference to tympanoplasty.

Dr. Everard L. Nauta of Haarlem recommended resection of phlebitic veins when the branches of the saphenous system are affected.

Contrast Radiography of Internal Organs

Dr. Rieder of Vienna discussed the value of sialography in the diagnosis of tumors of salivary glands.

A number of the congressists presented their cholangiographic technics and results. **Dr. E. Kaiser** of Zürich and **Dr. H. Willenegger** of Liestal, Switzerland, demonstrated their clinical results and the cholangiographic pattern after operations on the common duct (papillotomy) and showed an instructive film on cholangiography. **Dr. W. Zaunbauer** of Vienna demonstrated the results of simultaneous peroral and intravenous preoperative cholangiographic study, and Dr. Fuchsig, **Dr. Steiner** of Innsbruck and **Dr. H. Brücke** of Mürzzuschlag, Austria, discussed the technic and clinical value of the intraoperative method. Dr. Fuchsig reported the results

of 170 intraoperative cholangiographic studies and showed statistically to what extent this method is reliable. Dr. Steiner pointed out that in the presence of papallitis the common duct can seem to be obstructed, while a few days later, after the inflammation subsides, a free passage can be noted.

Dr. Brücke pointed out that radiographic investigation with a contrast medium alone may be insufficient. The simultaneous performance of a tonometric study was recommended. **Dr. Fritsch** of Vienna spoke of the technic of pancreatography. Several roentgen pictures were demonstrated and their use for the operative treatment of pancreatic disease outlined.

The papers were followed by lively discussion, with Drs. Fischer, Walzel, Kopf, Lutterotti, Sihlos, Fuchsig and Brücke participating.

Angiographic study of the kidneys was also dealt with. **Prof. H. Henninger** of Vienna was able to demonstrate aortographically the presence of a Goldblatt kidney in 2 patients. **Drs. Gollman** and **Vogler** of Graz described the technic of angiographic visualization of the kidneys (the catheter technic of Seldinger was used) and reproduced some roentgenograms of renal malignant tumors. Dr. Marberger spoke on contrast visualization of the urethra.

Surgical Treatment of Accidental Trauma Due to Sports

Dr. Chapchal opened the symposium by discussing the diagnosis of lesions of the semilunar cartilage. By means of an aqueous contrast medium 50 arthrographic studies were carried out; in only 3 per cent of the cases had the arthrographic method led to a wrong diagnosis. For the treatment of ruptures of the semilunar cartilage not only incision on the anterior surface of the knee joint but a posterior approach was recommended. **Dr. Paul Martin** of Lausanne discussed the manner in which some typical sports injuries originate, and added some remarks on therapy. **Drs. Marcus** and **Wruhs,** of Vienna, reported on the experience of the Austrian army with lesions of the semilunar cartilage. The differential diagnosis of various lesions of the knee joint was discussed by **Dr. Suckert** of Linz.

Prof. Dr. Albert W. Fischer
President
German Section

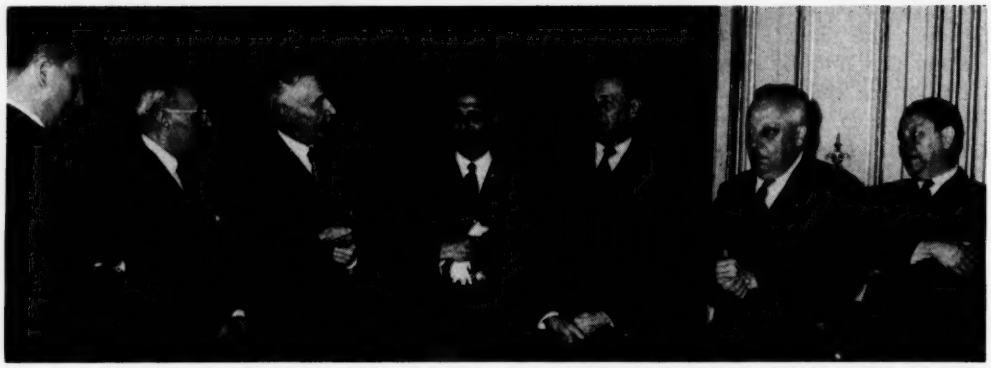
Dr. J. Böhler produced a motion picture on the transplantation of the popliteal artery after an injury due to a sports accident.

Dr. Jelinek of Vienna outlined some diagnostic signs for the differentiation of lesions of the collateral and the cruciate ligament. Operative treatment of these lesions was recommended.

Dr. Konecny of Graz reported on the experience of a special outpatient department for sports injuries.

Because of the sudden and tragic death of Prof. Mandl, all social activities scheduled for the Congress were canceled. Several foreign and Viennese surgeons, however, assembled at a dinner at the Bristol Hotel, with Dr. Thorek presiding. Prof. Schönbauer spoke with emotion of the loss which all had suffered, and together with those assembled pledged that the work of Thorek and Mandl must and will continue.

Rainer Gottlob



FORMAL PRESENTATION COMMITTEE (READING FROM LEFT TO RIGHT): **Dr. Bernard Lafay, Max Thorek, Prof. Joseph M. J. Bouvier, General Raymond Debénédetti, Prof. Raymond Darget, Prof. Pierre Donzelot and Prof. José Soler-Roig**

France Honors Founder of International College of Surgeons

The French Section of the International College of Surgeons usually holds its annual meeting in October. Apart from interest in scientific meetings and film sessions, this year the Fellows were drawn in even larger numbers than usual by a special event, which also brought to Paris members of the Belgian, Spanish, and Swiss Sections of the College.

Dr. Max Thorek had for some time been an Officer of the French Legion of Honor. Now, on October 9, in the presence of 250 members of the French Section of the International College of Surgeons and their guests, gathered at a luncheon in the Cercle Interallié, a representative of the French government conferred upon the Founder of the College the degree of Commander of the Legion of Honor.

Prof. Dr. Joseph M. J. Bouvier, F.I.C.S., Professor of Surgery at the University of Reims, President of the French Section of the International College of Surgeons; **Prof. Dr. Raymond Darget,** F.I.C.S. (Hon.), Professor of Urology at the University of Bordeaux, Secretary of the French Section, and **Prof. Pierre Donzelot,** Director General in the National Department of Education, spoke of the purpose and significance of the occasion. Prof. José Soler-Roig, of Barcelona, Spain, was among those who escorted Dr. Thorek at the investiture.

Dr. Bernard Lafay, former Minister of Health, Deputy of Paris, Member of the Academy of Medicine, and a Fellow of the International College of Surgeons, assisted by Prof. Pierre Donzelot and Dr. Raymond Debénédetti, Surgeon General of the Army of the Republic of France, presented the honor to Dr. Thorek. Dr. Lafay's moving address dealt not only with Dr. Thorek's achievements but also with the important part played by the International College of Surgeons in advancing the art and science of surgery throughout the world. He particularly expressed appreciation of Dr. Thorek's friendship for France and hailed it as a symbol of Franco-American amity.

Dr. Bernard Lafay's Address

Conferring Degree of Commander of the Legion of Honor upon

DR. MAX THOREK

Monsieur:

Before this illustrious assembly, before your friends and your peers—Prof. Bouvier, the President, and Prof. Darget, the Secretary, of the French Section of the International College of Surgeons, and Monsieur Donzelot, Director General in the National Department of Education, have spoken about you as only they can, knowing as they do the extent of your service to your profession and to humanity. It now becomes my great privilege, in a few moments, to invest you, in the name of the French Republic, with the insigne of Commander of the Legion of Honor.

It is a great joy for all of us to see conferred upon you this symbol of high distinction, through which France publicly pays its tribute of gratitude and admiration, less to enhance your fame than to honor itself.

May our deeply felt pride be my excuse for impinging upon your modesty, and let me tell, however briefly and imperfectly, why the recognition now accorded you is to us a joy and an honor.

Dr. Thorek, as I seek to define what you represent to us, it becomes evident that you appear to us under a threefold aspect. We celebrate in your person the surgeon and the man of science, the founder and guiding spirit of the International College of Surgeons, and finally (last but not least) the good and dear friend of France. I differentiate these three phases of one personality for the moment only, and only for the convenience of analysis. After all, we are in the country of Descartes, and your activities are so abounding and so numerous that one cannot encompass them without the aid of the Immortal Method.

I will recount here neither your life nor your career, not only because it would be a long undertaking, but most of all because you yourself have described them both, to our great pleasure, in *A Surgeon's World*, and you have done so with that finesse and that controlled emotion which are your very own. The gift of writing and of captivating your readers has, in equal measure with other gifts, been bestowed on you.

Allow me to comment simply but with profound admiration upon the rectitude of your life and your career, both of which you dedicate wholly to the surgical profession. That vocation has its source deep

Dr. Lafay saluting Dr. Thorek while Gen. Debénédetti adjusts the "cravate" bearing the insigne of Commander of the French Legion of Honor

Dr. Thorek accepting congratulations from Prof. Bouvier, Prof. Darget and Prof. Donzelot

in the past and like "good blood which cannot belie itself," continues its course in the person of your son, Dr. Philip Thorek. We know here, in this old country, many families with an eminent and beautiful medical tradition, in which from generation to generation the torch is as reverently received as it is transmitted. But how strong and pure must have been the flame within you to survive and to glow ever brighter in the storm of difficulties that beset you, years ago, when your family left its native Hungary! How your passion for work and your perseverance serve as an example! Those are the qualities that have made you "fit and able" to enter upon the career of a surgeon, "that grand and sacred adventure," if I may use your own words.

You have not only written that definition, you have lived it intensely. You have practiced, and, God bless you! you practice, with distinction, that profession which above all other professions is most demanding, because it exacts simultaneously both vast knowledge and extreme manual dexterity.

For more than forty years you have watched with equal concern over the fate of your patients, from the most humble to the most illustrious; you have done so as the confidant and the healer of human misery, as the physician of souls as well as of bodies. And for you who possess so much warmth and charity, the "great adventure" has in a way fulfilled its mission. "When it is a question of virtue," says Aristotle, "it is not enough to have knowledge of it; one must also possess it and practice it." To employ fully all the potentials of your ability has been your aim and your constant care.

But you are not only a surgeon. You are also a pioneer and a master in new fields. Your precise movements under the strong lights of the operating room have taught, most effectively, hundreds upon hundreds of young surgeons. You have tested, you have discovered, new techniques. Your published works are among the richest and the most exciting. We sense in them a vibrance, a lucid intelligence and a spirit ever on the alert. I do not pretend here even to touch upon the hundreds of titles that constitute your contribution to the medical and surgical literature. But I cannot resist the temptation of mentioning your method of electrosurgical obliteration of the gallbladder because your remarkable lecture at the Congress of Vichy in 1937 remains engraved in our memories, as do your masterly and monumental works, *Modern Surgical Techniques* and *Surgical Errors and Safeguards*, which have become classics in our time.

Many a man would have considered all these activities, which have earned for you a position of utmost eminence in the world of surgery, sufficient. But you are also, and forever, Max Thorek, the founder and guiding spirit of the International College of Surgeons.

After the difficult beginnings which you yourself have described, that College is now brimful of life, in the image of its creator. As you intended it to be, it is the meeting place without boundaries for all those that thirst for knowledge, and it is not only, as you have it, "a stream where the flow of surgical science runs faster and better; not only a source at which the am-

bitious youth of our profession is satiated, but also a force for international understanding and peace."

I can readily imagine that your joy must be great, however much effort it must have cost you and still costs you, when you observe the steady growth and development of the International College of Surgeons everywhere, and particularly so today. The French Chapter is meeting here in Paris for the two-fold purpose of pursuing its work and of paying to you just homage, fully and well merited.

Our tribute, finally, as I said, addresses itself to the great friend of France. It is difficult, it is daring almost to the point of presumptuousness, for a Frenchman to venture to discover the reason for that friendship. I imagine that for you France is that country of old Europe where a great part of the marvelous history of medicine and surgery took place, and in this context I am going to state parenthetically that with my friends I have taken the necessary steps, together with our Government, so that soon, to fulfill your wish, French medical history will be represented as it should be in the room which is reserved for France in the Hall of Fame of the International College of Surgeons. Also, I assume that you have found a sympathetic response to your ideas on the part of your French colleagues. I also believe that doubtless you love this country as we love it ourselves, and that you are not insensitive to this *douceur de vivre* and to the charms of the shores of the Seine and the Garonne.

And, on my part, I can assure you that we are happy about that attachment and are proud of a friendship of which you have given repeated evidence and which, beyond personalities and yet because of them, strengthens the ties that exist between our two nations.

Thus, Dr. Thorek, I evoke briefly and far from perfectly some of the reasons for our joy today.

You thoroughly deserve the degree of Commander, which is being awarded to you today and which places you at the head of the Napoleonic Legion, over which there always is an air of inspiration and of grandeur. I remember reading in your memoirs the part that the roll of drums had in your life, whether it reminded you of the terrors of your childhood or recalled to you the astonishing beginnings of your medical studies at the University of Chicago. You see, one cannot escape destiny; it is the roll of imperial drums and, simultaneously, the bugles of fame that echo about you now.

Let us congratulate you on the glory that

SEATED AT MAIN TABLE AT THE GALA LUNCHEON FOLLOWING THE CEREMONY OF INVESTITURE: **Mr. Edwin Fawer, Administrative Secretary, European Federation; Dr. G. F. Van Keerbergen, Vice-President, Belgian Section; Dr. Marc Iselin, Paris; Dr. Edmond Velter, Paris; Prof. Albert Pierre, LaChapèle, Bordeaux, Treasurer, French Section; Prof. Lucien Léger, Paris; Prof. J. H. Oltramare, Geneva, Secretary, European Federation; Prof. Pierre Donzelot, Paris; Prof. J. M. J. Bouvier, Reims; Dr. Max Thorek, Chicago; Minister Dr. Bernard Lafay, Paris; Prof. Raymond Darget, Bordeaux, Secretary, French Section; Prof. Jean Creyssel, Lyon, President, French Section; Dr. L. Lambert, Liège, President, Belgian Section; Dr. Marcel Thalheimer, Paris; Dr. Hahneman, Inspector General of Public Health, Paris; Prof. Auvigne, Nantes; Prof. Andre Ameline, Paris; Prof. P. L. A. Bertrand, Lyon; Dr. Andrè Soubiran, Paris, and Dr. Lucien Diamant-Berger**

Table of eminent European surgeons and their wives

is yours today, for it is good, it is just, that it should be thus.

It is good, it is just, that solemn homage is rendered to you, a tribute in which you will allow me to associate with your name that of your loving and devoted companion of days both good and ill, Madame Thorek, to thought of whom we now turn with respect, at the very moment in which we honor you.

Dr. Thorek, you once wrote, "Service for science is service for truth." It is because of men like you that, despite all that might tear it to pieces, mankind continues its immemorial march towards Truth and Light.

May the rite of investure with this symbol of glory fully express my country's appreciation of your true merits.

Max Thorek: In the name of the President of the Republic of France and by virtue of the powers conferred upon us, we declare you Commander of the Legion of Honor.

Text of Dr. Thorek's Reply

Monsieur le Ministre et cher Collègue, mon cher Collègue Donzelot, Mesdames, Messieurs:

Vous me voyez profondément ému par cet hommage rendu à mon humble personne. Mon seul regret aujourd'hui est que la femme qui est mon inspiratrice ne soit pas ici pour le partager avec moi. Je vis en ce moment une heure mémorable, entouré de hautes personnalités représentant l'une des plus grandes démocraties, la démocratie française, qui porte bien haut le flambeau de l'humanisme latin.

Ce n'est pas à mon seul mérite que je dois l'honneur qui m'est conféré aujourd'hui, mais à tous ceux qui m'ont aidé à créer le Collège International de Chirurgiens, et tout spécialment au Chapitre français, fondé par le professeur Raymond Darget, à son dévouement sans limites, à Madame Darget, sa collaboratrice charmante, ainsi qu'à tous ceux qui ont apporté leur contribution à ce chapitre, contribution non seulement scientifique mais humanitaire. Le Chapitre français est en effet un des fleurons de notre Collège International de Chirurgiens.

Mon voeu est que les deux grandes démocraties, la France et les États-Unis, que leur histoire unit si étroitment, continuent à être les défenseurs des libertés et restent liées par une amitié indissoluble.

Tous ceux qui me connaissent savent mon admiration et mon amour pour la France, qui a toujours été et qui restera, en dépit de vents et marées, une des sources de la pensée humaine, et une des lumières qui éclairent le monde.

Merci, mes amis. Vive la France!

British Fellows
INTERNATIONAL COLLEGE OF SURGEONS
Gather at Dinner

The British Fellows of the International College of Surgeons, meeting at the Royal Society of Medicine, in London, on October 14, gave a dinner in honor of Dr. Max Thorek, Founder of the College.

It was a most impressive assembly. About a hundred surgeons had come from many parts of the British Isles. Among those present were Mr. Hamilton Bailey, F.R.C.S. (Eng.), F.I.C.S. (Hon.); Dr. James F. Brailsford, F.R.C.P. (Eng.), F.I.C.S. (Hon.), Secretary and Treasurer of the International College of Surgeons for the British Isles and the Commonwealth; Mr. Patrick Clarkson, F.R.C.S. (Eng.), F.I.C.S.; Sir Zachary Cope, F.R.C.S. (Eng.), F.I.C.S. (Hon.); Mr. Eric L. Farquharson, F.R.C.S. (Eng. and Edin.), F.I.C.S.; Mr. Frederick P. Fitzgerald, F.R.C.S. (I.), F.I.C.S.; Mr. William D. Lovelock-Jones, F.R.C.S. (Edin.), F.I.C.S.; Mr. William Oliver Lodge, F.R.C.S. (Edin.), F.I.C.S.; Mr. Leslie C. Oliver, F.R.C.S. (Eng.), F.I.C.S.; Mr. Harold Ridley, F.R.C.S. (Eng.), F.I.C.S. (Hon.); Mr. John E. Ryan, F.R.C.S. (Edin.), F.I.C.S.; Mr. Kenneth Walker, F.R.C.S. (Eng.), F.I.C.S., and Mr. Dickson Wright, F.R.C.S. (Eng.).

After a toast to Her Majesty, a delectable dinner was served. The spirit of the meeting was high.

Congratulations were offered to Dr. Thorek, who had flown to London from Paris, where he had received the insigne of Commander of the Legion of Honor.

Dinner in honor of Dr. Max Thorek given by the British Fellows of the International College of Surgeons at the Royal Society of Medicine, London, October 14, 1957

Dr. Max Thorek presenting to Mr. Dickson Wright a substantial check, the contribution of the International College of Surgeons, toward the restoration of Harvey's burial place

Dr. James F. Brailsford spoke seriously and eloquently of the place of the College in Britain.

"The work of the British Section," said Dr. Brailsford, "was begun by Mr. Hamilton Bailey, whom we are pleased to see here with us tonight. He handed it over to me in 1945, and since that time we have increased in numbers. But with so many calls upon us and the difficulties of the time, progress is not rapid."

Referring to the founding of the International College of Surgeons, Dr. Brailsford stated:

"Besides all his numerous contributions to surgery and the philosophical writings associated with it, Max Thorek in 1935 launched a satellite in Geneva. That satellite has much in common with the more recent one. After twenty-two years it continues to become ever more brilliant and important. It has influenced every country in the world, and I am most anxious that in England, which has contributed so much to surgery, that surgeons shall take the prominent position to which their contributions entitle them.

"Of course this satellite has aroused jealousies. (It is continually bombarded by meteorites.) But in truth there is no excuse for jealousies. Rather, there is reason why every surgeon in every country should support its objectives. The College seeks to broaden education. It presents a united front to overcome difficulties, an important feature in any community, where local conditions may be inimical to resistance against that which is prejudicial to the life and practice of the surgeon. The International College of Surgeons exercises no bias and no favoritism. It seeks common friendship for all in all lands.

"We compete with no other body. We have no politics. All we seek is confederation with the surgeons of all countries."

Concerning Dr. Thorek, Dr. Brailsford commented:

"When I consider the life of Max Thorek, I am reminded of the words of Wordsworth. Some of his life appears to have followed closely that indicated by the poet.

Heaven lies about us in our infancy!
Shades of the prison-house begin to close upon the growing boy,
But he beholds the light, and whence it flows,
He sees it in his joy:
The youth, who farther from the East must travel,
Still is nature's priest, and by the vision splendid,
Is on his way attended:
At length the man perceives it die away,
And fade into the light of common day.

"The only difference I see is in the last two lines. Dr. Max still has the vision splendid, the International College of Surgeons, a Federation of world surgeons, which is ever expanding and increasing its influence. He not only launched the satellite, but he has persistently sustained it in every way possible, and we who are associated with him are proud of his success. We congratulate him on all the honors he receives. We are pleased to bask in the sunshine of the glory of our beloved founder. Long may he live to be with us and to help us."

From the Executive Director's Notebook

The past month has been taken up with many projects. One of our main considerations at this time is the planning of our educational program. A number of the surgical specialty sections are planning awards for surgical residents through essay contests. In addition, the Executive Council, at its May meeting, authorized the establishment of cash awards for residents in general surgery, which would take the form of prizes for original essays on surgical subjects as well as research projects. It is expected that announcements will be made in the immediate future—following action of the Committee on Education, of which **Dr. Horace Turner** is Chairman.

On October 18, I flew to Washington, D.C., to attend a luncheon given by **Dr. DeVault (Virgil T.)**, which included the Regent for the District of Columbia, **Dr. James Watts,** together with outstanding Fellows of the College. Plans were discussed as to the activities to be conducted in that area in the coming year. It is my intention to join with the Regent of Maryland in a similar luncheon in the very near future.

On October 26, I returned to Washington, D.C., to attend the opening sessions of the Order of Military Surgeons. The International College of Surgeons has many of its Fellows as members of this organization—which is one of the oldest of the surgical organizations in our country. **Dr. Winchell McK. Craig,** a past president of that organization and an Honorary Fellow of the International College of Surgeons, had a prominent place in the opening day's program.

I then journeyed to Birmingham, Alabama, where the State Surgical Section of the International College of Surgeons had its annual meeting. On the afternoon of October 22, it was my pleasure to address

Dr. Ross T. McIntire
F.A.C.S., F.I.C.S.

the State employees of the State Rehabilitation and Employment Services, as well as many other State officials on the problems of rehabilitation and employment of the physically handicapped. I also visited the Sheltered Workshop that the citizens of Alabama have established in Birmingham—which employs a large number of blind, severely crippled individuals and epileptics. These unfortunate people are making a very excellent wage and are now self-supporting. The Workshop has subcontracts with aviation companies and the blind do an outstanding job in salvaging materials that are brought in from these large organizations. The epileptics are being well trained and eventually will find occupation in industry.

During the day I met with **Dr. Paul Shannon,** the Regent for Alabama, and **Dr. Gilbert Douglas,** Vice-President of the United States Section of the International College of Surgeons. On Wednesday morning, the opening session of the meeting was held in the auditorium of the Medical School. The Mayor of the City of Alabama was present and made a very gracious speech of welcome. The program was excellent and Dr. Douglas and Dr. Shannon are to be complimented on the outstanding speakers that came from without the State and from their own membership.

Among the members of the College from without the State of Alabama were: **Dr. Curtice Rosser,** President of the United States Section; **Dr. Edward Compere,** President-Elect of the United States Section;

Dr. Ralph Coffey, Chairman of the Board of Regents, and **Dr. Moses Behrend,** Vice-President of the International Section. Several of the Regents from the Southern States were present, as well as many outstanding surgeons, and Fellows of the College, from other parts of the country.

As always, when one visits Alabama the social events are as fully outstanding as the scientific sessions. The Woman's Auxiliary, under the chairmanship of **Mrs. William Thuss,** had prepared a most interesting program for the wives of the surgeons.

The banquet, which was held Wednesday evening, was a very pleasant affair and had as its speaker **Dr. Joseph M. de los Reyes,** whose subject was, "International Medical Societies, Their Importance to the United States." **Mr. Eddie Glennon,** the General Manager of the Birmingham Baseball Club, gave a most interesting talk on "The World of Sports." He was introduced by **Mr. Zipp Newman,** who has been the Sports Editor of *The Birmingham News* for more than twenty years. Mr. Glennon is one of the best after-dinner speakers I have heard in years and he added much to the pleasure of all the guests. Mr. Newman I had known for many years and it was very pleasant to me personally to have the opportunity of visiting with him again. All in all, we had a very interesting evening and the banquet itself was excellent. Mrs. Paul Shannon contributed greatly in the arrangements.

On the following morning Dr. and Mrs. Gilbert Douglas entertained the visiting surgeons at breakfast. Approximately forty were present, and all who have ever attended a Southern breakfast will know what I mean when I say that we lost interest in practically everything for the next hour. It was a delightful occasion and Mrs. Douglas and her daughters-in-law are to be highly complimented.

The scientific program on Thursday continued in the pattern set on the first day. The closing speaker, **Dr. Tinsley R. Harrison,** Professor of Medicine at the Medical College of Alabama, gave a most interesting talk on the management of coronary disease. It is my belief that we should always include, in any program that has to do with cardio-vascular surgery, an outstanding internist who is a specialist in heart disease.

Georgia Meeting

On Friday morning, Dr. Compere and I flew to Atlanta, Georgia, where we had been invited to attend the meeting of the Georgia State Surgical Section. The meeting was held at the home of **Dr.** and **Mrs. A. Hamblin Letton** and was attended by some sixty people. An excellent buffet supper was served—and again the gracious informality of our Southern hosts made the evening a most pleasant one.

From the standpoint of the members of the Georgia Section, this type of meeting is most useful and productive in interesting surgeons who are not members. Doctor Compere was the guest of honor. It was my pleasure to renew my acquaintance with many of my old friends in Georgia, especially with **Dr.** and **Mrs. Edwin Irwin.** Dr. Irwin is an outstanding orthopedic surgeon in Atlanta, having been, for many years, the Medical Director of the Warm Springs Foundation.

Following this very interesting meeting in Atlanta, I returned to Chicago and to the many things at hand there. This article would not be quite complete without my mentioning briefly the new course that is under way in our School of the History of Surgery.

I urge all surgeons to attend any or all the lectures in this course. Surely all of us must be interested in the history of our own profession.

Ross T. McIntire

United States Section

THE PRESIDENT'S MESSAGE

Dr. Curtice Rosser

Elsewhere in this issue of the *Journal* there will be found a comprehensive and up-to-the-minute list of the various state officers of the United States Section of the International College. It is with considerable pride that I call to the attention of the membership in general the high calibre and professional standing of our Regents and our Vice-Regents, and of those who comprise the membership of the Credentials Committees of the various states. The College entrusts to the membership of these committees the screening and study of the qualifications of those who are taken into its membership as Fellows or as Associates. While the final decision is made always by the Executive Council at its formal meetings at our headquarters, **Dr. Ross McIntire** (our Executive Director), **Dr. Edward Compere** (our President-Elect), **Dr. Max Thorek** (our Founder and International Secretary General) and I are in agreement that the recommendations of the Credentials Committee shall continue to be the ruling factor in the admission or rejection of those applying and that, whenever the Executive Council, in some special situation, is at variance with the state committee, no action will be taken until the state organization has been informed through its Regent.

The Regents of the International College are not only the chairmen of the state committees but also make up, with the Executive Council and the Board of Trustees, the House of Delegates of the United States Section. The House of Delegates meets biennially and is responsible for the election of the major officers of the College. The next official meeting of the House of Delegates will be held in Los Angeles, California, in March, 1958, and at that time a new President and a new President-Elect of the United States Section will be selected by this body.

The Regents are nominated by the President of the organization or by the State fellowship and their selection confirmed by the Executive Council. The President of the Section also appoints a Chairman of the Board of Regents. I am sure you all know that **Ralph R. Coffey,** M.D., F.A.C.S., F.I.C.S., of Kansas City, is the present very efficient Chairman of this body and that he has contacted, through his travels, the majority of the Regents of this country. You will find, in the list as published in the *Journal*, that a few changes have been made in the Board of Regents and in the list of Vice-Regents. **Paul W. Shannon,** M.D., F.I.C.S., a Diplomate of the American Board of Orthopedic Surgery, is now the Regent for Alabama; **Alfred Hugo Rossomando,** M.D., F.A.C.S., F.I.C.S., a Diplomate of the American Board of Urologic Surgery, is the current Regent for the State of Idaho. **William Marcus McMillan,** M.D., F.A.C.S., F.I.C.S., Diplomate of the American Board of Surgery, is Regent for Illinois. **William Carpenter MacCarty,** Jr., M.D., F.I.C.S., a Diplomate of the American Board of Surgery and the American Board of Radiology, has assumed the regency for the State of New Hampshire and **Robert A. Cosgrove,** M.D., F.A.C.S., F.I.C.S., a Diplomate of the American Board of Obstetrics and Gynecology, is now the presiding officer for the State of New Jersey. **Henry Warner Brown,** M.D., F.A.C.S., F.I.C.S., a Diplomate of the American Board of Surgery, is the new Regent for the State of Ohio and **Herbert**

Emerson Hipps, M.D., F.A.C.S., F.I.C.S., a Diplomate of the American Board of Orthopedic Surgery, has assumed the regency for the State of Texas. Due to the tragic and untimely death of my good personal friend, **Ralph F. Allen**, M.D., F.I.C.S., of Miami, **Harold O. Hallstrand**, M.D., F.A.C.S., F.I.C.S., has agreed to take his place as a Vice-Regent for Florida.

I bespeak for all of these men and their committees the wholehearted and necessary co-operation of the Fellows of the various states.

Curtice Rosser

An Invitation

To All Surgical Residents and Residents in the Surgical Specialties:

You are cordially invited to attend any and all Regional Meetings of the International College of Surgeons. A special invitation is extended to the ELEVENTH INTERNATIONAL CONGRESS OF THE INTERNATIONAL COLLEGE OF SURGEONS in conjunction with the TWENTY-THIRD ANNUAL CONGRESS OF THE NORTH AMERICAN FEDERATION (Canada, Mexico and United States Sections) to be held in Los Angeles, California, March 9-14, 1958.

No registration fee, dues or charges of any kind are made to Surgical Residents or to Junior Members of the International College of Surgeons. One of the principal objectives of the College is to help young surgeons to broaden their knowledge of surgery and increase their technical skill.

For further information, address: DR. ROSS T. McINTIRE, *Executive Director*, United States Section, International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois.

The International Executive Council

of the

INTERNATIONAL COLLEGE OF SURGEONS

is pleased to announce that to provide timely and essential information of meetings and other national and international activities of the College and its Chapters

The BULLETIN

Section II of

The Journal of the

International College of Surgeons

will resume monthly publication beginning with the issue of January 1958

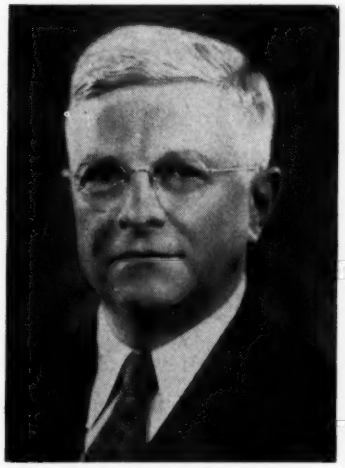
Section News

UNITED STATES

DR. BURGESS L. GORDON JOINS LOVELACE FOUNDATION

Dr. William R. Lovelace, F.I.C.S., D.A.B., Past President of the United States Section of the International College of Surgeons, writes us from the headquarters of the Lovelace Foundation for Medical Education and Research, Albuquerque, New Mexico, announcing the appointment of **Dr. Burgess L. Gordon** of Philadelphia as director of medical education and executive secretary of the Foundation.

Dr. Gordon is President Emeritus and Professor of Medicine of the Woman's Medical College in Philadelphia and currently is President of the American College of Chest Physicians. He is to head a vigorous and intensive program of graduate medical education so as to advance the status of patient care in the Southwest.



Dr. Burgess L. Gordon

DR. WINCHELL McK. CRAIG AT MILITARY SURGEONS MEETING

Dr. Winchell McK. Craig, F.A.C.S., F.I.C.S. (Hon.), D.A.B., of Rochester, Minnesota, Professor of Neurosurgery at the Mayo Foundation, participated in the program of the Sixty-Fourth Annual meeting of the Association of Military Surgeons of the United States in Washington, D.C.

On Monday, October 27, in a symposium on medical care in time of disaster, Dr. Craig spoke on "Quo Vadis," or the future, as he sees it, in such fields as the medical aspects of disasters and of civil defense work.

On Wednesday, Dr. Craig presided over a joint medical and surgical panel on the management of patients with coronary arterial disease.

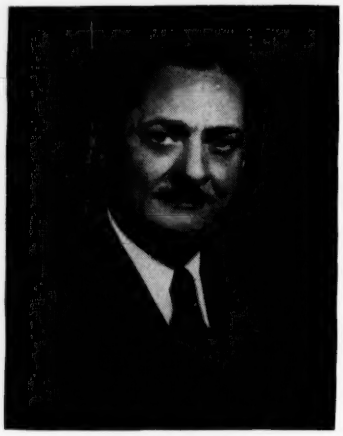
Dr. Craig, who has maintained a special interest in the medical and surgical aspects of disasters and civil defense activities in general, was president of the Association of Military Surgeons of the United States in 1953, and is now a member of its advisory council.

During World War II he was chief of surgery at the National Naval Medical Center at Bethesda, Maryland, and became the first medical officer from civilian life in the history of the United States Navy to attain the grade of rear admiral. He is a consultant to the Surgeon General of the United States Navy, and was one of the founders of the Reserve Officers of the Naval Service.

FIRST ALBERT GALLATIN AWARD TO DR. JONAS E. SALK

Dr. Jonas E. Salk received the first Albert Gallatin Award at the annual dinner of The Albert Gallatin Associates of New York University held on November 12 in the Hotel Pierre.

JOHN WESLEY SHIRER PRESIDENT OF PENNSYLVANIA MEDICAL SOCIETY



Dr. John Wesley Shirer
F.A.C.S., F.I.C.S., D.A.B.

John Wesley Shirer, M.D., F.A.C.S., F.I.C.S., D.A.B., Vice Regent for Pennsylvania, United States Section of the International College of Surgeons, was elected president of the Medical Society of the State of Pennsylvania.

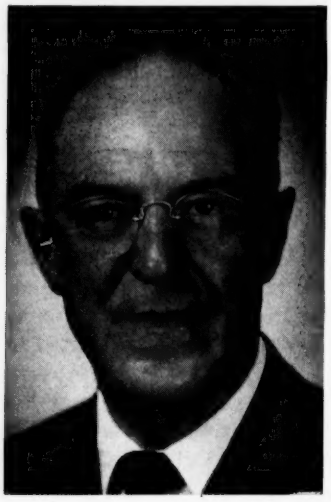
Dr. Shirer is associate professor of surgery at the University of Pittsburgh School of Medicine, his alma mater, and is on the staffs of Presbyterian, Woman's, Eye and Ear, Children's, and Elizabeth Steel Magee Hospitals. He has just completed his term of office as president of the staffs of Presbyterian and Woman's Hospitals.

Dr. and Mrs. Shirer, the former Mary Ringwalt Garber, have six children—four daughters and two sons.

INTERNATIONAL COLLEGE OF SURGEONS GRANT TO NORTHWESTERN

The International College of Surgeons recently donated $1,000 in support of research work done in the Department of Orthopedic Surgery of The Medical School of Northwestern University under the sponsorship of **Dr. Edward L. Compere.** This is the first grant of its kind given for the advancement of surgical research in a specialized division of surgery by the International College. **Dr. Richard H. Young,** Dean of The Medical School, has announced that a special account will be set up in the Department of Orthopedic Surgery for this purpose.

DR. FREDERICK FIGI OF MAYO CLINIC HEADS PLASTIC SURGEONS



Dr. Frederick A. Figi
F.A.C.S., F.I.C.S. (Hon.), D.A.B.

Dr. Frederick A. Figi, F.A.C.S., F.I.C.S. (Hon.), senior consultant in plastic surgery at the Mayo Clinic, has been elected chairman of the American Board of Plastic Surgery.

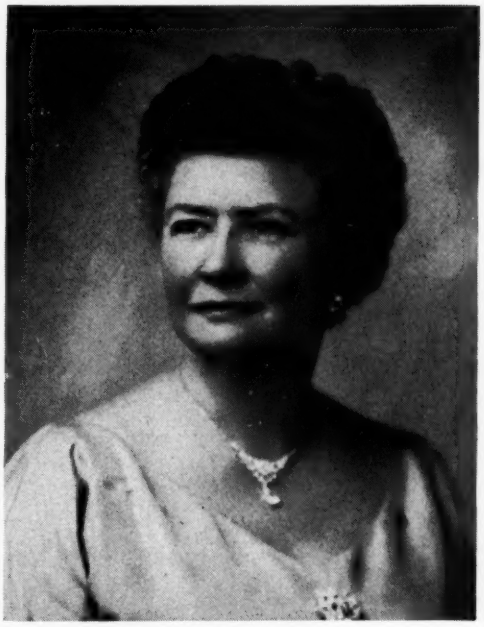
Woman's Auxiliary

THE PRESIDENT'S MESSAGE

Some Thoughts on Giving

The blessed season of Christmas has always been identified with giving. The giving spirit of our Woman's Auxiliary impressed me strongly when I was first installed as your President and I devoted my first Christmas page in the Bulletin to the giving of our Auxiliary for scholarships, surgical research and The Hall of Fame. This giving has continued through the past year.

Dr. Edward Compere has prepared a comprehensive report of these monetary gifts. It was read at a meeting of the Executive Council of the International College of Surgeons. A copy of Dr. Compere's report, together with a letter from your president of the Woman's Auxiliary, is being mailed to each Member of the United States Section of the College. Your husband will probably have received this report by the time this page is in print. I should like therefore to speak of a different kind of giving, the giving of one's self, which is truly the greatest of gifts.



Mrs. Clifton L. Dance

Our own Dr. Thorek has set the pace in this respect. His whole life is a giving: of himself, his energies, his heart, his mind. We in the Auxiliary, our officers, our boards, our committees and countless individuals are giving of our time and energies, according to our abilities and the need. During the past year many of our women have come forward to help, particularly at the Regional meetings. I have spoken of the Regional Meetings before and now we have gratifying evidence, in the form of letters and new Members, that the good word has spread. Sections that formerly were represented by only a few members in the Auxiliary are now becoming actively interested in joining our ranks.

Letters: In connection with the meeting of the Alabama Section, October 30-31, held at the Medical College of Alabama, under the chairmanship of **Dr. Gilbert F. Douglas,** I have a letter from **Mrs. William G. Thuss,** who was chairman of the Woman's Committee of the Alabama Section. She writes, in part, "We were pleased to have out-of-state guests. **Mrs. V. T. DeVault** stirred up interest at our luncheon by speaking of the Auxiliary work. I feel sure that more women would accompany their husbands if they knew the type and extent of entertainment we have to offer. The ladies who met with us were charming,

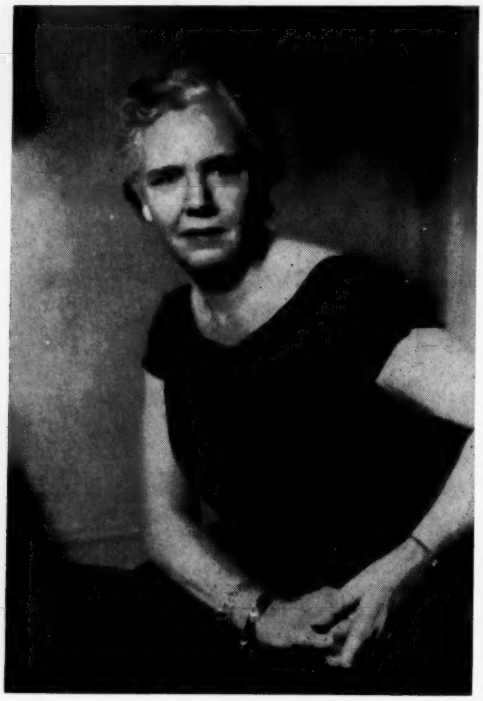
and, for me, this October meeting will carry happy memories."

Now to quote from Mrs. DeVault's letter, "I had a most enjoyable time with the Alabama ladies. Mrs. Thuss did an excellent job as chairman of activities. There was a luncheon at the Down Town Club. We had a tour and a luncheon at The Club atop Red Mountain which was really plush! Birmingham in the heart of Dixie exemplifies charming and gracious hospitality. I feel there is a growing awareness of our Auxiliary purpose and projects and I gathered that they found us an enjoyable group to be with."

Surely there is a goodly amount of genuine pleasure connected with our Auxiliary work. In looking over the program of this meeting in Alabama, I see, under the heading "Entertainment," that there were "Songs by **George C. Douglas, M.D.**" I believe that Dr. George is one of Dr. Gilbert's sons, and he was accompanied by **Mrs. Gilbert Douglas, Jr.** This presents a picture of a charming family. A picture to warm the heart.

Let us then, in our imagination, at this holiday season, join with the good Douglas family in Christmas spirit and song. With gratitude in our hearts for our manifold blessings, let us begin with "Joy to the World." *Catherine M. Dance*

Mrs. Paul C. Craig



Mrs. Paul C. Craig

Mrs. Paul C. Craig, president of the Woman's Auxiliary to the American Medical Association, has for a long time been active in the Woman's Auxiliary to the International College of Surgeons.

She is the wife of **Dr. Paul C. Craig,** F.A.C.S., F.I.C.S., D.A.B., of Wyomissing, Pennsylvania.

Dr. Craig is a member of the editorial board of *The Journal of the International College of Surgeons* and is on the advisory board of the International Executive Council.

Mrs. Craig, the former Catharine Palmer, is a graduate of West Virginia University, and did advanced work at Columbia. She served as assistant dietitian at Presbyterian Hospital, New York, and as dietitian at Reading Hospital, Reading, Pennsylvania.

Mrs. Craig brings a wealth of organizational experience to her new position. She has an exceptional record of active auxiliary work beginning at the local level and advancing to leadership in state, regional, and national auxiliary affairs.

Announcing

CONGRESS OF THE EUROPEAN FEDERATION OF THE INTERNATIONAL COLLEGE OF SURGEONS

Brussels, Belgium

May 15-18, 1958

Preliminary Program

I. OPENING SESSION

Moral Relations of Patient and Surgeon.

II. SCIENTIFIC PROGRAM

1. **So-called Diseases of Civilization, and the Role of Surgery in their Treatment.**
2. **Diseases of Atomic Origin, from the Viewpoint of the Internist and Surgeon.**
3. **The Pathology of the Ampulla of Vater and Contiguous Structures.**
4. **Pitfalls in the Treatment of Fractures of the Upper Limb.**
5. **Surgery of the Genito-Urinary Tract.**
6. **Miscellaneous Subjects:**
   Human Tissue Banks
   Surgery of the Oesophagus
   Head Injuries, etc.

CONGRES DE LA FEDERATION EUROPEENNE DU COLLEGE INTERNATIONAL DE CHIRURGIENS

Bruxelles: du 15 au 18 mai 1958

Programme Provisoire

I. SEANCE INAUGURALE

Relations morales entre le malade et le chirurgien.

II. PROGRAMME SCIENTIFIQUE

1. **Les soi-disant maladies de la civilisation et le rôle de la chirurgie dans leur traitement.**
2. **Les maladies d'origine atomique, du point de vue de l'interniste et du chirurgien.**
3. **La pathologie du carrefour Vatérien.**
4. **Les pièges de traitement des fractures du membre supérieur.**
5. **Chirurgie du sympathique génito-urinaire.**
6. **Communications particulières: banques de tissus humains, oesophage, traumatismes du crâne, etc.**

CONGRESSO DELLA FEDERAZIONE EUROPEA DEL COLLEGIO INTERNAZIONALE DI CHIRURGIA

Brussels dal 15 al 18 Maggio, 1958

Programma Provisorio

I. SEZIONE INAUGURALE

Relazione morale tra il malato e il chirurgo.

II. PROGRAMMA SCIENTIFICO

1. **Come si chiamano le malattie della civilizzazione e il ruolo della chirurgia nel loro trattamento.**
2. **Le malattie di origine atomica dal punto di vista dello internista e del chirurgo.**
3. **La patologia dell'ampolla di Vater.**
4. **Le piaghe da trattamento delle fratture dell'arto superiore.**
5. **Chirurgia del simpatico genito-urinario.**
6. **Comunicazioni particolari:**
   banca del tessuto umano
   chirurgia del esofago
   traumi del cranio, etc.

KONGRESS DER EUROPÄISCHEN FEDERATION DES INTERNATIONALEN CHIRURGENKOLLEGIUMS

Brussel, 15.-18. Mai 1958

Provisorisches Programm

I. INAUGURAL SITZUNG

Die Moralischen Beziehungen zwischen dem Parienten und dem Chirurgen.

II. WISSENSCHAFTLICHES PROGRAMM

1. **Die sogenannten Zivilisations-Krankheiten, und die Rolle des Chirurgen in deren Behandlung.**
2. **Die Erkrankungen atomischer Herkunft, von Aussichtspunkt des Internisten und des Chirurgen.**
3. **Die Pathologie des Vater'schen Kreuzweges.**
4. **Die Fallen der Behandlung der Knochenbrüche der oberen Extremität.**
5. **Die Chirurgie des Genito-Urolog. Sympathicus.**
6. **Freie Mitteilungen.**

Die Anmeldungens sind sobald als möglich—sowohl für das wissenschaftliche Programm als für die Hotel Reservation (der Kongress findet während der grössten Weltausstellung seit dem Krieg statt) zu schicken an:

Dr. Georges Van Keerbergen, 50, rue de la Loi, Bruxelles (Belgien) oder an das Sekretariat des I.C.S. in Genf. (Schweiz) 6-8, rue de la Confédération.

Sections Abroad

ARGENTINA

INTERNATIONAL COLLEGE OF SURGEONS CONDUCTS POST-GRADUATE SEMINAR IN CANCEROLOGY

Dr. Abel N. Canónico, F.I.C.S., of Buenos Aires, Regent of Oncological Surgery of the Argentine Chapter of the International College of Surgeons, served as co-ordinator of a week-long postgraduate course in cancerology held in Buenos Aires, August 19-24.

Dr. Canónico opened the course with a thorough discussion of the theoretical concepts of the biological aspects of carcinoma. This was followed by a three-session symposium on carcinoma diagnosis presented by **Dr. Guillermo Terzano, Dr. Diego Fernández Luna, Dr. Arturo Arrighi,** and **Dr. Louis Maria Urquiza.**

Dr. Manuel Riveros, F.I.C.S., of Paraguay, was the distinguished guest essayist dealing with the diagnosis and treatment of malignant tumors of the skin and of the mucosa of oral cavities.

Dr. Canónico, together with **Dr. Norberto Stapler,** led a symposium on carcinoma of the colon, Dr. Manuel Riveros, **Dr. Louis R. Bulla,** and Dr. Diego Fernández Luna participating. In a session bearing on carcinoma of the breast, Dr. Canónico shared the program with Dr. Bulla, who discussed radiotherapeutic aspects of treatment.

Dr. Canónico later presented an analysis of the management of advanced carcinoma, discussing both chemotherapy and hormone therapy, as well as radical surgical procedures.

The Seminar ended with a most searching critique by Dr. Riveros into the causes of delay in the diagnosis of carcinoma.

BRAZIL

Prof. Dr. Alipio Pernet, F.I.C.S., São Paulo, has been commissioned Lieutenant Colonel in the Brazilian Army, but will continue in his post as Director of the Aeronautical Polyclinic.

Dr. Pernet is Editor of Summaries in Portuguese for *The Journal of the International College of Surgeons.*

FRANCE

SECTION ELECTS OFFICERS

The French Section has elected the following officers for the year 1958:

PRESIDENT: Prof. Dr. Jean Creyssel, Lyon

1ST VICE PRESIDENT: Dr. Henri Louis Welti, Paris

2ND VICE PRESIDENT: Prof. Dr. Jean-Yves Terracol, Montpellier

SECRETARY GENERAL: Prof. Raymond R. Darget, Bordeaux

TREASURER: Prof. Albert Pierre LaChapele, Bordeaux

PROF. CREYSSEL AT LYONS

Prof. Jean Creyssel, F.I.C.S., has been appointed Professor of the Surgical Clinic at the University of Lyons.

SWITZERLAND

PROF. JENTZER ADDRESSES GENEVA NATIONAL INSTITUTE

Prof. Dr. Albert Jentzer, F.I.C.S., former head of the Department of Surgery at the University of Geneva, presented, on June 18, 1957, a highly scientific dissertation in the Section of Natural Sciences and Mathematics before the Geneva National Institute, entitled: "A Sensational Recovery: Domestic Thermo-Nuclear Fusion."

In Memoriam

J. WILLIAM WRIGHT
M.D., F.A.C.S., F.I.C.S., D.A.B.
1887-1957

Dr. J. William Wright
F.A.C.S., F.I.C.S., D.A.B.

Dr. J. William Wright, prominent surgeon, died recently in his home city, Indianapolis.

An ear, nose and throat specialist, he had an office with his son, Dr. J. William Wright Jr., F.I.C.S., D.A.B.

He was President of the Indiana Medical Association in 1952 and of the Indianapolis Medical Society in 1947.

Dr. Wright headed the physicians' committee in the hospital development program to raise funds for the city's hospitals. He was a director of Community Hospital.

He was a native of Chatsworth, Ontario, and moved to Indianapolis in 1894. He was graduated from the Indiana University School of Medicine in 1911.

The Officers and the Editorial Board of the International College of Surgeons extend sincere sympathy to Mrs. Wright and to Dr. Joseph William Wright, Jr.

FRENCH SECTION MOURNS DEATH OF TWO SURGEONS

DR. MAURICE CHEVASSU

French surgery has suffered a great loss in the death of one of its outstanding and widely known masters, Prof. Dr. Maurice Chevassu, of Paris. He was Professor of Urology at the University of Paris and at the Hospital Cochin. He contributed greatly to the advancement of science and surgery.

Profoundly interested in the symbolic value and educational purpose of the Hall of Fame, he held it ever highly in his esteem. His death is greatly mourned by the Fellows of the International College of Surgeons, and all his colleagues.

DR. JOSEPH DARAIGNEZ

The French Section of the International College of Surgeons is deeply grieved over the recent death of one of its eminent surgeons, Dr. Joseph Daraignez, of Dax, Landes.

Dr. Daraignez was one of the first of the surgeons of France to become a member of the International College of Surgeons.

In Memoriam

FERNANDO VELEZ PAIZ
M.D., F.I.C.S.
1906-1957

Dr. Fernando Velez Paiz, of Managua, Nicaragua, former Secretary of the Nicaragua Section of the International College of Surgeons, died recently of heart disease.

He was associated with the Managua General Hospital. He had studied and worked for eighteen years in Paris, where at one time he held the position of Chief of a Surgical Clinic, and for a period of time had worked with Alexis Carrel. He brought to his practice in Managua a wealth of knowledge, ability and experience, and did much to advance science and surgery and to serve his city and his country.

Dr. Paiz established an Institute for the Treatment of Cancer. The Institute will bear his name, and in it will rest his mortal remains, in a tomb, with his bust upon it, which will soon be unveiled.

He left his wife and two children. It is the prayer of Sra. Velez Paiz that their son follow in the footsteps of his father, and to the end that it may serve as an inspiration to him, she treasures her husband's Medal of Fellowship in the International College of Surgeons.

Dr. Paiz is greatly mourned by all who knew him.

FERRIS SMITH, M.D., D.A.B.
1884-1957

Dr. Ferris Smith, distinguished plastic surgeon of Grand Rapids, Michigan, died on September 18, 1957.

Dr. Smith was consultant in plastic surgery to the Blodgett Memorial Hospital and was on the staffs of St. Mary's Hospital and the Butterworth Hospital, all of Grand Rapids.

CHARLES BERNARD VOIGT
M.D., F.I.C.S.
1874-1957

Dr. Charles Bernard Voigt
M.D., F.I.C.S.

Dr. Charles Bernard Voigt, a retired eye, ear, nose and throat specialist, of Mattoon, Illinois, died recently at his home of a heart ailment.

Dr. Voigt received his medical degree from the University of Illinois in 1900, and practiced in Mattoon until his retirement in 1954. He had been a surgeon for both the Illinois Central Railroad and the New York Central Railroad.

Dr. Voigt traveled widely, and attended meetings of the International College of Surgeons both in the United States and abroad.

Dr. Voigt will be missed in his community and in the circles where through the years his personality had endeared him to so many people.

Medical News Front

CRUISE CONGRESS OF HEMISPHERE OPHTHALMOLOGISTS

The Pan-American Association of Ophthalmology, an 18-year-old organization with some 2,000 members representing all the countries of the Western Hemisphere, will hold its second Cruise Congress, February 1-14, 1958, on board the S. S. Queen of Bermuda. The itinerary includes a day each in San Juan, Puerto Rico; Ciudad Trujillo, Dominican Republic; Kingston, Jamaica; Port-au-Prince, Haiti, and Nassau, Bahama Islands.

Dr. James H. Allen, New Orleans, is chairman of the program committee, which is arranging symposia, free papers, motion pictures, seminars and exhibits stressing subjects of current interest in diseases of the eye. Meetings will be held on shipboard and also in port cities with local societies of ophthalmologists. There will be opportunities to visit hospitals and to meet the staffs of medical schools in the islands.

Dr. William L. Benedict, F.A.C.S., F.I.C.S. (Hon.), Rochester, Minnesota, is chairman of the organizing committee.

THE SITUATION IN CUBA

A letter from Dr. Louis H. Bauer, secretary of the World Medical Association and a past president of the American Medical Association, informs us that he has requested permission of President Batista to send a small delegation to Cuba to investigate charges that members of the medical profession there have been murdered and jailed.

In a letter to Batista, he cited allegations made during the last month that doctors had been "persecuted, ill treated and tormented" for taking care of members of insurgent groups who were ill and wounded.

UNIVERSITY OF ILLINOIS POSTGRADUATE COURSE

The next postgraduate course in Laryngology and Bronchoesophagology to be given by the University of Illinois College of Medicine is scheduled for the period January 27 through February 8, 1958. The course is under the direction of Dr. Paul H. Holinger.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

CENTRAL SERVICE ORGANIZATION

The more than 80 Central Service Personnel, representing 13 states, who attended the sessions held for them at the Twenty-Second Annual Congress of the United States and Canadian Sections of the International College of Surgeons, in Chicago, September 8-12, decided to try to form a Central Service Association.

A committee was organized to draw up plans for such an organization on a national level.

Miss Mary Helen Anderson, R.N., St. Luke's-Presbyterian, Chicago, was elected temporary chairman.

Mr. John French, R.N., Weiss Memorial, Chicago, was appointed secretary pro tem.

Members of the committee are:

Wilma E. Leppert, R.N., West Side V. A., Chicago, Illinois
Eva Buckingham, R.N., Billings, Chicago, Illinois
Esther Abbott, R N., Wesley Memorial, Chicago, Illinois
Blanche Jorgensen, R.N., Weiss Memorial, Chicago, Illinois
Florence Irwin, R.N., Memorial, South Bend, Indiana
Cecilia Yastremski, R N., Hahnemann, Philadelphia, Pennsylvania

FOURTH INTERNATIONAL GOITER CONFERENCE

The London Thyroid Club and the American Goiter Association announce the Fourth International Conference on Goiter will be held in London, England, in 1960. Scientific sessions will be held in the Royal College of Surgeons on July 6, 7 and 8, 1960.

Those who desire to submit abstracts of papers for consideration of appearing on the program should write:

Selwyn Taylor, F.R.C.S., 3 Roedean Crescent, Roehampton, London S.W. 15, England; or John C. McClintock, M.D., 149½ Washington Avenue, Albany 10, New York, U.S.A.

TECHNOLOGIST WINS AWARD FOR RESEARCH ON CURARE

Bernice Theissen Elert, medical technologist at Charles T. Miller Hospital in St. Paul, Minn., received the 1957 Kimble Medical Technology Research Award at the recent annual convention of the American Society of Medical Technologists.

Mrs. Elert's method enables doctors to ascertain how long the drug remains effective in the body, and it is being used by medical researchers in studies for the improvement of anesthesia. For the first time, it is now possible to measure the quantity of curare in the blood, to determine the correlation of the blood level with paralysis, duration of action and rate of destruction in the human body.

TWO OUTSTANDING SCIENTIFIC PROGRAMS OF PROFESSIONAL TRAVEL IN 1958

HAWAII March, 1958

After the Los Angeles Congress of the International College of Surgeons—a delightful visit to Hawaii—a glorious opportunity to relax.

Depart Los Angeles on March 14th:

10 day Waikiki Air Holiday	**from $385.00**
16 day Air Tour	**from $655.00**
20 day Air/Sea Combination	**from $690.00**
22 day Cruise/Tour	**from $680.00**

3 day tours on West Coast available for those who do not have the time to visit Hawaii.

May 15-18, 1958
CONGRESS of the EUROPEAN FEDERATION of the INTERNATIONAL COLLEGE OF SURGEONS

BRUSSELS Belgium

Attend the Congress during the Brussels World Fair and see Europe at its best in the Spring.

42 days from New York via steamer on April 30th:

minimum Cabin Class	**$1585.00**
minimum First Class	**$1890.00**

34 days from New York via air on May 4th:

air tourist	**$1640.00**
first class air	**$1850.00**

Reservations and information from:

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1958 CONGRESS

NATIONAL INTERNATIONAL

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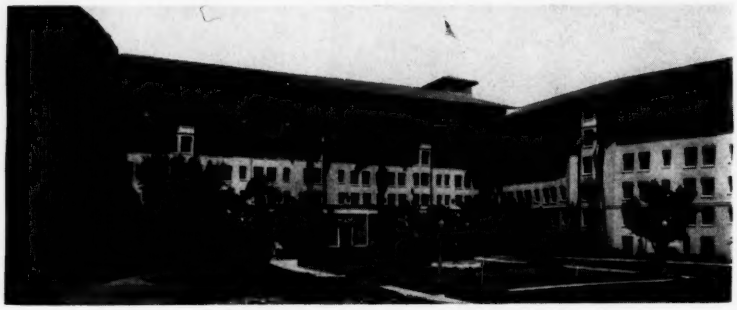
INTERNATIONAL COLLEGE OF SURGEONS



THE AMBASSADOR — LOS ANGELES
Congress Headquarters

MARCH 9-14, 1958

Address inquiries to: **Secretariat, International College of Surgeons**
1516 N. Lake Shore Drive, Chicago 10, Illinois

APPLICATION FOR HOTEL ACCOMMODATIONS

I.C.S. HOUSING BUREAU
c/o Los Angeles Chamber of Commerce
Postoffice Box 3696
Los Angeles 54, California

Please make the following reservation for the Congress of the International College of Surgeons in Los Angeles March 9-14, 1958:

First Choice Hotel_____ Second_____ Third_____

Single Room $_____ Double Room $_____ Twin Room $_____

Small Suite $_____ Large Suite $_____

Arrival date _____ a.m. or p.m. Departure date _____ a.m. or p.m.

Names and addresses of all persons who will occupy the rooms requested_____

_____

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Confirm reservation to:_____

_____

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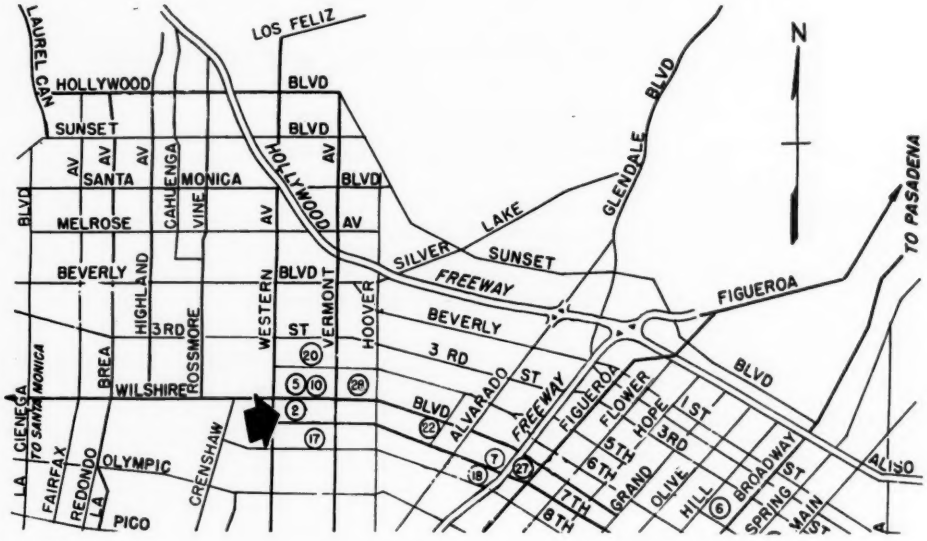
(Confirmation will come direct from the hotel. No deposit required.)

1958 CONGRESS LOS ANGELES



LOS ANGELES HOTEL RATES*

Map No.	Hotel	Zone	Single	Double	Twin Bed	Suites
2	**Ambassador**	(5)	$ 9.00—$19.00	$12.00—$22.00	$12.00—$22.00	$30.00—$38.00
5	Chapman Park	(5)	$ 7.00—$11.00	$10.00—$12.00	$12.00—$15.00	$15.00—$40.00
6	New Clark	(13)	$ 5.00—$ 8.00	$ 6.00—$10.00	$ 7.00—$12.00	$18.00—$24.00
7	Commodore	(17)	$ 4.00—$ 7.00	$ 6.00—$10.00	$ 6.50—$10.00	$14.00—$24.00
10	Gaylord	(5)	$ 7.00—$ 9.00	$ 9.50—$12.50	$ 9.50—$12.50	$16.00—$25.00
17	Mayan	(5)	$ 4.00—$ 6.00	$ 5.00—$ 7.00	$ 6.00—$ 8.00	$12.00—$15.00
18	Mayfair	(17)	$ 6.00—$ 9.00	$ 8.00—$11.00	$ 9.00—$12.00	$20.00—$34.00
20	Normandie	(5)	$ 4.00—$ 8.00	$ 6.00—$11.00	$ 7.00—$11.00	$10.00—$15.00
22	Park Wilshire	(5)	$ 5.00—$ 7.00	$ 7.00—$ 9.00	$ 9.00	$12.00—$15.00
27	Statler	(17)	$ 8.00—$12.00	$11.50—$16.50	$12.00—$17.00	$22.00—up
28	Town House	(5)	$ 9.00—$18.00	$14.00—$23.00	$14.00—$23.00	$25.00—$60.00

BEVERLY HILLS HOTEL RATES*

Beverly Hilton	$13.00—$23.00		$16.00—$26.00	$37.00—$40.00
Beverly Wilshire	$12.50—$22.00	$15.00—$24.00		$36.00—$43.00

*Rates given are as of October, 1957

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Map outlining regional divisions of the United States Section of the International College of Surgeons: 1. Pacific Division; 2. Rocky Mountain Division; 3. North-Central Division; 4. Southwestern Division; 5. Great Lakes Division; 6. Southeastern Division; 7. Mid-Atlantic Division, and 8, Eastern Division.

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Season's Greetings

SECTION II

Bulletins of Meetings—Announcements
National and International Activities

Vol. XXVIII ***December, 1957*** **No. 4**

Schedule of Meetings

INTERNATIONAL COLLEGE OF SURGEONS

1957

Dec. 27 Nagpur, India	Meeting of the Indian Federation Section, I.C.S.

1958

March 9-14 Los Angeles, Cal.	Eleventh Biennial International Congress of the International College of Surgeons in conjunction with the Twenty-Third Annual Congress of the North American Federation (Canada, Mexico and United States Sections)
May 12-15 Teheran, Iran	Third National Congress of the Iranian Section, I.C.S.
May 15-18 Brussels, Belgium	First Congress of the European Federation, comprising all European Sections, I.C.S.
July 1-5 Manchester, Vermont	Eastern Regional Meeting, United States Section, I.C.S.
Oct. 17 Tokyo, Japan	Fifth Annual Congress of the Japan Federation Section, I.C.S. coinciding with the Around-the-World Postgraduate Clinics
Nov. 16-18 Hot Springs, Virginia	Mid-Atlantic Regional Meeting, United States Section, I.C.S.

AROUND-THE-WORLD POSTGRADUATE CLINICS

1958 Coordinator—Dr. Arnold Jackson, F.A.C.S., F.I.C.S.

1959 Coordinator—Dr. Edward L. Compere, F.A.C.S., F.I.C.S.

These postgraduate trips are especially planned for members of the International College of Surgeons. Surgical demonstrations and clinics will be given by members of the various Sections of the College in many parts of the world.

For details of travel information contact *promptly* the official travel representatives of the College:

INTERNATIONAL TRAVEL SERVICE, INC.

Palmer House 119 South State Street Chicago 3, Illinois

SECOND LECTURE SERIES

1957-1958

School of the History of Surgery and Related Sciences
International Surgeons' Hall of Fame

1524 Lake Shore Drive, Chicago

LECTURES BEGIN AT 8:00 P.M.

OCTOBER 17, 1957 . . . . *"The Evolution of Anatomy"—Dr. H. W. Magoun, Department of Anatomy, Univ. of California Medical School, Los Angeles, California*

NOVEMBER 7, 1957 . . . . *"Leonardo Da Vinci: The Anatomist"—Dr. Elmer Belt, Historian specializing in the history of the life of da Vinci; formerly Professor of Surgery, College of Medical Evangelists, Los Angeles, California; recipient of many awards and distinctions for his study and contributions to the literature of Leonardo da Vinci, Los Angeles, California*

DECEMBER 3, 1957 . . . . . *"The Evolution of Physiology"—Dr. C. D. O'Malley, Educator and Author, Department of History, Stanford University, San Francisco, California*

JANUARY 7, 1958 . . . . . *"The Pharmacy in History"—Mr. George B. Griffenhagen, Curator, Division of Medicine and Public Health, Smithsonian Institution, United States National Museum, Washington, D. C.*

JANUARY 28, 1958 . . . . *"Surgeons in the Invisible World: Immunology and Microbiology"—Mr. Morris Leikind, Medical Historian and Archivist, Armed Forces Institute of Pathology, Walter Reed Army Medical Center, Washington, D. C.*

FEBRUARY 18, 1958 . . . . *"Transfusion and Infusion"—Dr. Leo Zimmerman, Secretary-Treasurer, Society of Medical History of Chicago; Chairman of the Department of Surgery, Chicago Medical School*

MARCH 4, 1958 . . . . . *"Physical Diagnosis: Hippocrates, Auenbrugger, and Laennec"—Dr. Saul Jarcho, Associate Physician, Mt. Sinai Hospital, New York; Consultant to the Surgeon General of the Army*

APRIL 15, 1958 . . . . . *"Radiation in the Service of Surgery"—Dr. Eugene F. Lutterbeck, Professor of Radiology, Cook County Graduate School of Medicine, and Radiation Director, Cook County Hospital*

APRIL 29, 1958 . . . . . *"Endocrinology and Surgery"—Dr. Rachmiel Levine, Historian; Director of Medical Education, and Chairman of the Department of Medicine, Michael Reese Hospital, Chicago*

MAY 13, 1958 . . . . . *"Historical Facts About Morgagni, Rokitanski and Virchow, Pathologists"—Dr. Esmond R. Long, Emeritus Professor of Pathology, Henry Phipps Institute, University of Pennsylvania, formerly its Director of Laboratories, Pedlar Mills, Virginia*

CONGRESS OF THE EUROPEAN FEDERATION INTERNATIONAL COLLEGE OF SURGEONS

To be held during the World Fair in Brussels, Belgium

May 15-18, 1958

The United States Government is spending many millions of dollars for an Exhibition Hall and for exhibits at the World Fair in Brussels, Belgium. It promises to be most successful.

The Congress of the European Federation of the International College of Surgeons, which is to be held during the World Fair in Brussels, Belgium, May 15-18, 1958, also promises to be a brilliant success.

The Congress will be held under the auspices of the Belgian Section and under the direction of
Prof. Dr. John Henri Oltramare, F.I.C.S., University of Geneva
Secretary of the European Federation of the International College of Surgeons
and
Dr. Leopold Lambert, F.I.C.S., President
Dr. G. F. Van Keerbergen, F.I.C.S., Vice President
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of the Belgian Section

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Chicago 3, Illinois

Important: **Since this Federation Congress is being held during the World Fair, hotel reservations are now being made. Our official travel service has secured a block of first-class hotel accommodations for members of the International College of Surgeons and their friends. It is essential that you make your reservations NOW.**

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